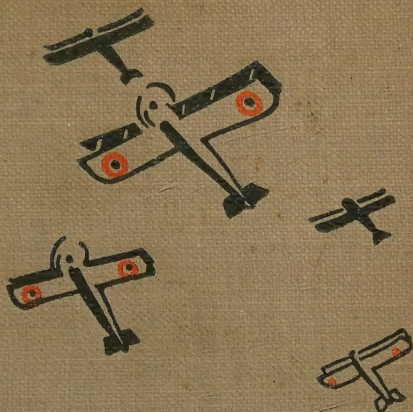
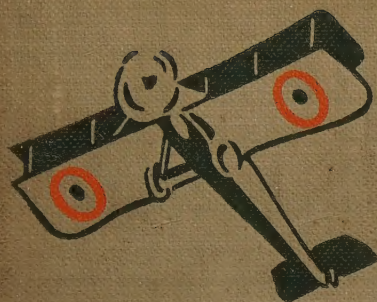
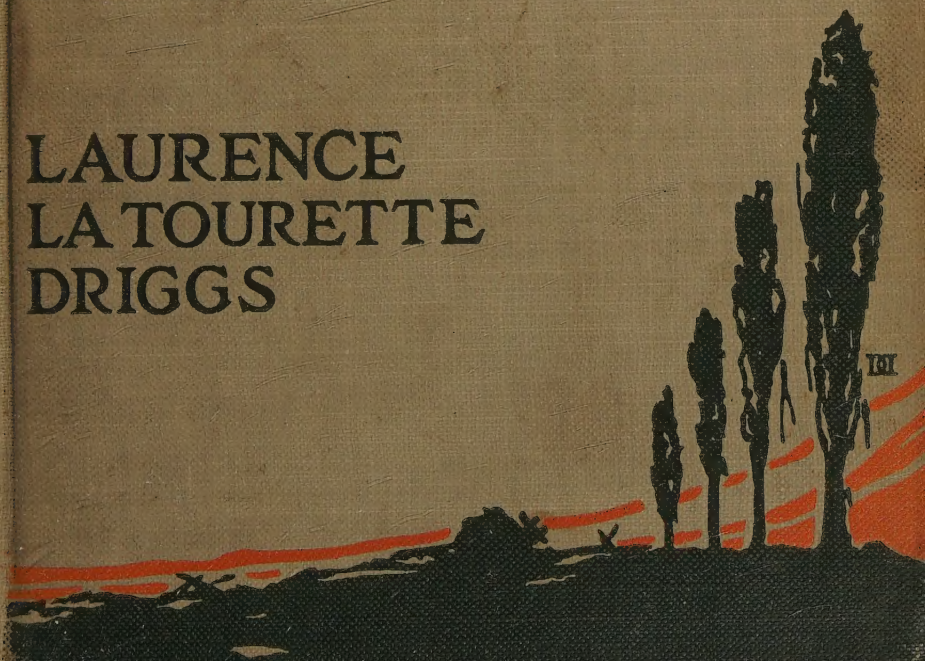




THE ADVENTURES OF ARNOLD ADAIR, AMERICAN ACE

LAURENCE
LA TOURETTE
DRIGGS



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April 22 - 1918.

THE ADVENTURES OF
ARNOLD ADAIR,
AMERICAN ACE



A Million Cubic Feet of Gas has Exploded!
FRONTISPIECE. See page 225

THE ADVENTURES OF ARNOLD ADAIR, AMERICAN ACE

BY
LAURENCE LATOURETTE DRIGGS

WITH ILLUSTRATIONS FROM DRAWINGS BY
HENRY S. WATSON AND FROM PHOTOGRAPHS



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TO
THE TWO DEAREST BOYS
IN THE WORLD
FROM THEIR OLD PAL
THE AUTHOR

CONTENTS

	PAGE
I AN OLD BOY RETURNS	1
II THE WATER FIGHT	15
III <i>THÉ COMPLET</i>	25
IV A FORTNIGHT AT ECHSTEIN	34
V THE VETERAN OF SEDAN	44
VI A CROSS-COUNTRY FLIGHT	54
VII AN UNEXPECTED REUNION	64
VIII THE BEGINNING OF THE WAR	74
IX AEROPLANE FOES	95
X MY FIRST SUBMARINE	119
XI THE TAIL SPIN	138
XII OUR SURPRISE PARTY	157
XIII A BATTLE ROYAL	168
XIV THE BRIDGE ON THE OISE	191
XV A ZEPPELIN RAID OVER PARIS	208
XVI STRAFING JACK JOHNSON	227
XVII A BIT OF NIGHT WORK	245
XVIII WAITING	262
XIX THE WALVET SCOUT	276
XX A FOGGY MORNING	285
XXI WHOSE PRISONER?	296
XXII AN OLD SCHOOLFELLOW	306
XXIII THE LINEN DUSTER	316
XXIV COLLECTING A BET	327

LIST OF ILLUSTRATIONS

	PAGE
A Million Cubic Feet of Gas has Exploded! <i>Frontispiece</i>	
He Had to Stand Erect in the Wind to Aim It .	110
Another Machine was Falling in Flames ahead of Me, as I Came Around	163
As She Began to Move in Spite of Me, I Clutched the Edge of the Cockpit and Swung in beside Philippe	177
Dropping, Car by Car, into the Muddy Waters of the Oise	206
"Swim out and Climb up on the Pontoon. Hurry!"	258
What Thoughts Came to Those Daring Minds as They Watched this Glorious Sunset Dying?	272
Turned to Me across the Intervening Chasm the Grinning Face of my Dearest Chum of the Old Verney School in Switzerland.	284

THE ADVENTURES OF ARNOLD ADAIR, AMERICAN ACE

CHAPTER I

AN OLD BOY RETURNS

ON the left bank of beautiful Lake Geneva nestles the little town of Verney, made famous throughout the commercial world by its one conspicuous export — the most toothsome of sweet chocolate. Its mountains are covered with lofty trees and smiling vineyards, and through occasional open vistas one glimpses from the lake the gleaming white front of the vineman's distant chalet.

Remote and secluded before the day of railroads, this little Swiss village harbored famous persons in its time! For here, perhaps by reason of its very exclusiveness, came to speak secretly together, some three or four centuries ago, three very renowned monarchs of Old Europe. They spent several tranquil days communing together under the shade of the

2 ARNOLD ADAIR, AMERICAN ACE

plane trees overlooking the promenade along the shore of the lake. The terrace they occupied rose some twenty feet above the heads of the passers-by. They looked below them at the broad breast of the romantic Lake Geneva, shining green with the depth of the melted Alpine snows, until in the opposite distance, its colors melted away into the dim brown of the woods of Savoie in France.

The unpretentious inn that sheltered these distinguished men shook off its lowly demeanor the day following their departure. Thenceforward and to this very day, this delightful hostelry is known to the proud citizens of Verney and to the discriminating travelers of the whole wide world as "Les Trois Couronnes."

Soon after the glamour of their majesties' visit so glorified the little village of Verney, an adjacent property of some twenty acres touching on the lake was acquired, and the Verney School, consisting of several low-running buildings of stone, was erected. Surrounded with gigantic elms and oaks, the school grounds intersected with numerous ancient paths, the old vine-covered stone edifice claims to-day the venerable and undisputed distinction of being quite the oldest boys' school in the world.

Famous leaders among men from every country

on the globe received their earliest education here. Their fathers and grandfathers before them left their names carved upon the desks and stone of the low-ceilinged class-rooms of old Verney.

Few in number as compared with the average school of to-day, the twoscore pupils of the Verney institution gathered yearly together from the four quarters of the earth, speaking different tongues and reared under widely varying régimes. Class work was conducted in French, but the playground of the school was daily saturated with every language known to the human race.

They came and went — these youngsters — and as generations passed, occasional remote descendants appeared and demanded admission by reason of old family attachment to the Verney institution.

Thus did this peculiar and distinctive Verney-School sentiment often bring a cementing kinship to casual acquaintances in remote parts of the world; antagonisms and even enmity were smothered by the mighty binding influence of Verney loyalty.

In the closing days of June, 1911, the old school with customary methodical gravity, was preparing for its usual historic relaxation in honor of Verney's handful of youthful graduates.

Two remaining days of entertaining the visiting

4 ARNOLD ADAIR, AMERICAN ACE

families with sports on the field; with the annual boat race on the lake; with teas on the lawn,— and the old school would turn down another leaf. Some of the old boys would drop in to cheer the crew on to victory before entering their impatient offspring on the class rolls for the coming year. If the crew won again, some one was sure to treat the whole school to a “Special” on the terrace of Les Trois Couronnes. If they lost, some tender-hearted mother could undoubtedly be counted upon to provide a consolation “Special” anyway.

Arnold Adair received with apparent unconcern the mournful intelligence that his family could not come to attend his graduation. He had hoped to help Verney win this year’s boat race from their haughty rivals of the Lausanne School under the approving yells of his dear old pal — his dad. How often the old boy had recounted to Arnold his famous victory over Lausanne thirty years before! And he wanted to exhibit to Reinhardt his beautiful mother, his sister Alice, and the two youngsters who would someday be Adair I and Adair II at the old school. And perhaps the family might arrange to take a month or two in Bavaria near Echstein, where he and Bunny could explore on horseback those wonderful forests adjoining the von Bruck estate.

His trunk was packed, and Arnold was alternately gazing through his little window into the cool shadows of the yard and regarding on his bed the armful of precious belongings which would not be squeezed into the already overcrowded baggage, when Bunny's flying steps suddenly waked him into alert consciousness.

"Arnold! Quickstep! Hurry! An aeroplane is circling over the lake and is going to land here. Oh! beat it!"

The two boys took the old stone stairs in one expert plunge. Out the door, across the yard, and over the hedge into the smooth football field they flew, and soon they stood panting, nose in air, watching the graceful swooping of a large biplane, its loud purring motor sending mad thrills of excitement down the spines of some forty fascinated boys as it descended in wide spirals towards the very spot on which they were standing.

In another moment the gigantic bird skimmed the low hedge, flattened out neatly and bumped along the turf for a hundred paces before coming gently to a stop in the center of the field.

A hooded and be-goggled aviator leaped out the cockpit and began swinging his long arms lustily around his body. In a trice the swarm of small boys

transferred itself en masse around the person of the newcomer.

He paused in his warming up and looked them over in assumed amazement.

"What town is this?" he demanded sternly.

"Verney!" forty voices replied as one.

"The devil it is! What school is this?"

"Verney!" The chorus responded.

"God bless my soul, you don't mean it. Can you give the cheer now, I wonder?"

"Philippe Pieron!" screamed Bunny, leaping forward. "Take off those goggles! It's Philippe, it's old Dependable! Phil!" he whooped, dancing excitedly through the group. "Everybody together now—the old school cheer! One, two, three! Rah! Rah!! Rah!!! Verney!"

Laughing and hugely pleased with his reception, the old form leader of earlier days removed his disfiguring goggles and took off his leather coat.

"Come on now. Seventy-five of you lend a hand here, and we'll push her up to the gym. Steady there, you fat boy. What's your name?"

"Mudhen!" shouted the attentive chorus.

"Ah! Mudhen, good. Well, ease her along gently now. Away we go!"

Picking up the tail of the machine, the old boy

guided its path while some eighty-odd helping hands found a holding place along the wings and body. Tremulous with excitement, the supporting party slowly approached the gymnasium front with their precious burden.

Swinging her nose around to the field, the airman carefully lowered the tail to the ground, then beckoned the admiring crowd of boys before him.

"Now youngsters," he cautioned, shaking a warning finger around the semicircle, "don't you touch it! If a town boy comes within ten paces of her, knock his head off!

"Ah, Doctor, good afternoon, sir," cried Philippe, as the Head with dignified stride approached from the yard.

"Welcome home, Pieron. This is a treat to us all. You flew here — from where?"

"From the flying school at Dijon, sir. I came quite on the impulse, and must get back before dark, sir."

"Amazing young gentleman you are, Philippe. What a sight for this old school to witness! You flew one hundred miles and more, over these mountains, only to fly home again at once! It is amazing! Incredible!"

"It is a great sport, sir. I was twelve thousand

feet up in crossing the Jura Mountains, and suddenly I discovered I could see Lake Geneva fully a hundred miles away. I determined to come on and drop down on the old football field. It is nothing!

"But I must fill up with petrol," went on the airman, turning towards his engine. "Bunny! Hop into town and send out twenty gallons of the best petrol you can find; and don't let me count ten while you are gone!"

"Stay!" interposed the Head, restraining Bunny with one hand and Arnold with the other. "Let me make a bargain with you, Philippe," he went on, smiling. "Permit me to replenish your fuel tank for you from my garage, and in return do me the favor of explaining this marvelous aeroplane to our boys."

"Willingly!" agreed Pieron, bowing. "But I am not really in such a hurry as I would have Reinhardt believe. He always was a lazy little beggar."

"Not so, Pieron, I assure you. I am very proud of your young cousin." Turning to Reinhardt he said, "Please direct Whiezer to bring down four jars of petrol in his wheelbarrow. And hurry back." "Now, boys, attentive to Monsieur Pieron!"

Awe-struck and fascinated, the small boys alternately regarded the wonderful bird and the still more

marvelous hero who had guided it. Even the fact that it was part of their school duty to listen did not spoil for them the romance of this unusual treat.

Now a student in Tours, and one of the comparatively few human beings who actually had flown through the limitless skies, and who laughed and said it was nothing at all to learn, the "old boy" received from his young listeners every mark of homage and devotion usually accorded to worshipful heroes by their faithful slaves.

He had flown out of far-away France, over mountains and valleys, past forests and slopes, and had unerringly dropped down to rest on the little football field of the old school by the lake. Even to his young cousin, Reinhardt, and to the unemotional young American, Arnold Adair, this extraordinary feat out-rivaled anything ever yet devised by Julius Cæsar, by Homer, or by Baron Munchausen.

Philippe Pieron took an unusual interest in the young New Yorker. He was the handsomest youngster in the group, to a certainty. But in addition to the beauty of feature and erect poise of body, there was a loveableness about the boy that was altogether irresistible. His eyes were riveted upon the airman as he described the balancing of the machine in the air. His lithe body swayed unconsciously as he fol-

10 ARNOLD ADAIR, AMERICAN ACE

lowed the pilot's illustration of a figure 8 in the air.

"They call you Chingachgook?" said the great Philippe, putting a hand on Arnold's shoulder. "Why such a euphonious term of endearment? Whence the characterization?"

"Because he's the only American Indian we've got left," Reinhardt interposed, grinning. "He's from New York."

"You might have dubbed him Uncas," returned the Old Dependable, "and come nearer my idea. However, the old school's badly run since my day."

An appreciative snicker ran through the forty boys on the lawn. What a rare old toff he was!

"Now, I've got just an hour in which to play around here, including a treat to the whole school at the Trois Couronnes — if M. Selig will let you go," continued the airman, glancing at the Head. "*Thé Complet* on the terrace — grape jam, strawberry jam, and honey! What? All the cakes you can eat. What say, boys?"

The crisp air was split with the "what-say's," and the Head smiled his approval of this gratifying and unexpected entertainment.

Only Arnold Adair lingered by the shapely biplane as the swirling horde of schoolboys scattered for the street.

"Please, sir," said Arnold earnestly, as the surprised host turned to call him. "Would you mind if I didn't go? I thank you very much — but I'd like to stay by the machine if I may, sir."

The ruddy airman stood regarding Arnold steadily, while blushes of confusion flooded the boy's cheeks.

"Why?" asked Philippe quietly.

"Because I'm foolish about them, I suppose, sir. I am always imagining how it must feel to fly. I dream about it. I'd go a million miles to see one fly. I've never actually seen one all to myself like this. I won't touch it, sir, but I would like to stay with it until you come back, if I may, please." The lad spoke impetuously and earnestly. His face was flushed, and his eyes shone with frank eagerness as he waited upon the older man's reply.

"Good. You stay, young 'un. I'll be back as soon as I see the animals fed. Get in the front seat if you like, but don't touch the instruments — and be careful where you step."

Pieron turned on his heel and was gone. Arnold stood bewildered with his good fortune, too dazed to immediately gratify his longing to actually sit in the pilot's seat.

He gently touched the fragile wings of fabric and rubbed his fingers softly along the polished wooden

12 ARNOLD ADAIR, AMERICAN ACE

struts. Looking about to satisfy himself he was alone with the miracle of his dreams, he proceeded to drink to the very last drop the cup of ecstatic happiness before him.

Standing first in front, then at the wing tips, then at the tail, he bent and raised himself, following the while the voluptuous, buoyant lines of the beautiful curves in wings, body, and tail. The graceful creature seemed animate and intelligent, so vividly did its eloquent lines express majestic power.

Arnold caressed it and spoke to it as he would have petted a beautiful horse. Finally, too full of magnificent elation to further risk bursting, he grasped the edge of the cockpit and climbed into the seat.

The realization of all his dreams! He was sitting on the identical seat that had lately been hovering miles and miles above the earth. His imagination pictured the scene from above. He felt the rush of cool wind through his hair. Calm and poised, his confident little brain disregarded the terrors and difficulties of flight and swept aloft and away and away, over the sheer peaks of the Dents du Midi opposite, darting up, diving down, swooping in wide lazy circles this way and that, following the familiar motions of the sea gull as he hurled his imaginary aircraft through the skies. Through the uttermost distances

he soared, all his senses enveloped in one mad longing to go on and on forever.

"Here you are, Bunny. Climb in there with Arnold and buckle that safety belt around the pair of you."

Arnold came back to earth with a start of surprise. Fascinated, he watched the matter-of-fact Philippe pulling on his flying cap. Bunny was approaching the front seat and looking somewhat askance at the winged monster. Straight ahead of the machine lay a smooth run of grass across the football field, then the low hedge separating it from the roadway outside, and then the wide expanse of Lake Geneva!

"I'll take you up for a little hop, if you like, Chingachgook," said Pieron, eyeing the youngster keenly. "You are not going to be nervous about it?"

"No, sir, thank you, sir — not a bit, sir," replied Arnold hoarsely, every atom of color leaving his cheeks as he fully grasped the other's invitation. All his pores seemed filling with determination and audacity. For the first time in his life he felt the dauntless power of the fatalist.

Bunny slid in beside him, flinging his cap on the ground as he settled himself in the seat.

"Fire out your cap, Arnold, and button up your

14 ARNOLD ADAIR, AMERICAN ACE

coat. Holy cats! but I am scared! Are you?"

"No!" replied Arnold, his eyes shining luminously. "Others have done it, so why should we be afraid?"

The Old Dependable leaned over them and adjusted the strap securely across their bodies. Jumping down, he busied himself a moment with the engine, then looking ahead across the level grass, he estimated the distance to the hedge.

"All right," he said presently. "We're off."

The propeller buzzed. A volley of ripping staccato explosions shot out of the exhaust. Quivering gently as she plumed herself for flight, the gigantic bird slowly moved ahead towards the alluring expanse of clear sky. Then with a rush and a whirl she left the ground, soared over the low hedge with a contemptuous little bow, and sped away into the blue.

CHAPTER II

THE WATER FIGHT

IT promised to be a large day for Arnold and Reinhardt, who were slowly moving arm in arm up the broad path to the tennis courts. The Water Fight this morning, the boat race with Lausanne this afternoon, and then the farewell spread on the Terrace! They did not observe the Doctor regarding them admiringly from his study window, as they passed along the path. Their heads were close together. Through the dancing foliage an excited group of schoolboys could be seen haranguing under the trees in the process of wagering their last treasure on the coming combat.

The enemy gladiators were on hand, already stripped down to their bathing suits. Barefooted, the two Domaz brothers walked nervously about the cool ground, receiving last measures of counsel from their supporters. The school was pretty evenly divided in the betting. Pierre Martin had indignantly refused to wager his new bean shooter against two slabs of sweet chocolate on the Domaz team. To the

16 ARNOLD ADAIR, AMERICAN ACE

onlookers this seemed an admission to be shrewdly charged up against Arnold Adair and Reinhardt von Bruck. Little Pierre quickly dissipated this impression, however, by demonstrating the extraordinary accuracy of his bean shooter and by pointing out that the Mudhen's chocolate was obviously far from fresh.

One of the masters lounged about on the settee, smoking his pipe and reading the morning *Temps*. Against the iron fence, butcher boys loitered and peered longingly through the palings. Townspeople hurried by on the street, bent on their morning's marketing.

The two brothers from Potsdam, Domaz I and Domaz II, were decidedly the oldest boys in the school. Their imposing airs of superiority and their repeated victories over the younger boys placed the betting somewhat in their favor. To-day they were determined to win for two reasons; as the professional might say, "for the purse and for private reasons."

"Adair!" called M. Debeau, folding up his paper, as the two challengers appeared on the courts. "Why are you wearing your sweater? Ah! von Bruck too has arrayed himself similarly. What's the game, young 'uns?"

"It's permitted, sir, isn't it?" inquired Arnold,

standing bathrobe in hand before the master's settee.

"We can wear anything we like, can't we?"

"Yes, it's regular enough," replied the referee, eyeing appreciatively the slim athletic figure of the young American. "But you'll only soak it, so what's the use? Hello! you've both got on your skating caps! Come, what are you up to, my lads?"

"They've got five minutes to change in if they want to," put in Reinhardt, throwing his bathrobe on the grass, "This is *our* uniform."

Hoots of derision arose from the rival camp as the boys crowded around. The Prussians joined in the clamor with disdainful allusions to von Bruck's Saxon hair.

"Afraid you'll get your hair wet, Bunny?" called out Domaz I, pointing derisively at his opponent's stocking-cap. "You'll have to wear something thicker'n that!"

"All right, men; if you are ready, we are!" said the master, rising from his seat and pushing his way through the howling mob of boys. The piercing whistles and shrieks of defiance ceased as the school trooped after him and watched him prepare the field of battle.

Two long fire hose lay coiled under their respec-

tive hydrants at opposite sides of the tennis courts. The referee directed a score of willing hands to the task, and in a twinkling both batteries were run out to the center of the grounds, their two-inch nozzles pointing at each other across some ten paces of grass sod.

"Heads or tails, Domaz I?" the master cried, spinning a coin in the air.

"Heads, sir!" called the tall boy quickly.

"Heads, she is! Choose your side and take your places! The east end, eh? All right, Domaz. Here you are, Adair and von Bruck. Take your positions.

"Hardcastle and Lyon, stand by to turn on the water. Now! All ready!

"Fire!" shouted the master, thrusting his arm in the air.

"Stand back everybody and give them room!"

A delightful ripping and spitting sound mingled with the piercing shouts of forty excited boys, as the two streams of water poured forth. High over the maple branches the first drops fell, as the whooping small boys scurried for shelter.

Arnold Adair stood at his nozzle with his face away from the enemy. Reinhardt stood close behind him, his head reaching to the level of Arnold's

shoulder as he peered ahead at the target opposite.

Their two opponents stood shoulder to shoulder, their four hands grasping the long nozzle which was jerkily vibrating under the steady pressure of the icy water.

As the two streams leveled out, they met squarely in the center of the intervening space with a crushing splash that sent the spray far afield. Shrieks of joy from the bleachers greeted this spectacle, and forty earnest voices yelled encouraging advice to the four determined champions.

"A little higher, Domaz, old boy! Soak it to 'em! Eat 'em alive!"

"Ay-ay-y, Bunny! Get out in front and face 'em. Afraid you'll get your hair wet? Go to 'em! That's the boy! You're missing them both. Look where you're squirtin'!"

"Steady, Arnold!" said Reinhardt, peering under the shelter of Arnold's arm as the heavy rush of water caught his leader squarely on the jaw. "Step to the right a bit! There! Now we're out of it! Now! Hold her there!"

"Whoop-e-e-e" sang the jubilant dancing boys, as the broad formation of the Domaz brothers caved in under the straight fire of the Adair-von Bruck cataract. "Hold her there, Bunny! You've got 'em

on the run! Soak 'em! Soak 'em! Oh! Joy! Whoop-e-e-e!"

"Some strategy there," muttered the master, regarding the maneuvering of the two smaller lads. "If they've got the endurance, they'll win!"

So long as the blinding stream of water splashed in their faces, the Domaz boys were unable to direct their own fire with accuracy. Their stream wavered and jumped about the field, as successive blasts poured into their faces. Twice they jumped aside, dragging their hose with them. Each time the watchful Bunny nailed them in their new position before they could level their hose into correct range.

A tremendous cheer from the onlookers broke forth. Domaz II had slipped and fallen. Arnold turned to the front to see what had happened. At the same instant, the enemy's stream, directed by the alert Domaz I, caught him full in the face.

Gasping and choking, he staggered backward, pulling his hose with him. His stream shot far above the heads of his opponents. They improved the opportunity by rushing forward ten feet, smiting with cruel persistence the swaying head of Arnold Adair with their unimpeded stream of icy water.

"Stoop down and turn your back to them, Arnold," directed Reinhardt. "Now be ready to jump

to the left two paces, and let me take the front a while."

With cool decision General von Bruck completed the maneuver. He instantly brought himself in front of Arnold and throwing his weight upon the nozzle, bore the stream directly onto the exulting faces of the Domaz brothers opposite. Swack! Swack!! with calm precision Reinhardt batted one enemy face after the other. The Domaz hose pointed due south, as they shielded their faces with their arms, full into the center of the howling gallery.

Arnold had time to recover his wind and clear his eyes while his team-mate was so handsomely holding the field alone. In another moment he faced around.

"Come on now, Bunny! Rush them off their feet! You keep the aim while I drag up the hose. Away we go!"

Twenty feet apart, now fifteen — finally down to ten feet they narrowed the space separating them. The enemy had not been able to see during the entire advance, so cleverly had Bunny sprayed their faces.

Soon the force of the water's pressure at such close range became too violent for boyish endurance. The Potsdammers hid more and more of their bodies behind each other. The exposed skin on their arms and shoulders was becoming red and bruised under the

excessive punishment. Both Arnold and Reinhardt were protected from the stinging drops by their coverings. The bloodthirsty little ruffians on the side lines begged the crumbling Domaz team to stand up and take their medicine — but in vain!

Domaz II slipped again and went down flat on his back, wrenching the hose away from the nozzle which was still held firmly in his brother's grip.

Before any one realized what was happening, the older brother seized the nozzle by the small end and dashed desperately forward into the onrushing stream towards the two victors.

"For shame, Domaz!" sternly called out the referee. "Come back! You are not playing the game!"

"Oh, yip-ee! The Pizaroo is going to fight! Let him have it, Bunny. Soak him in the snoot, the big bully! Oh, my eye! Oh! Oh! Cool his Prussian blood with a little more cold water, please, Mr. Adair! Oh! Joy! Perfect hit! Lovely day! Oh, joy! Who-ray!"

Grimly fighting his way ahead, the big boy advanced. He was thoroughly angry and vengeful; his malicious eyes burned with hatred. Heroically, little Bunny held his unyielding post in front of Arnold. Calmly measuring the decreasing distance, he met the

advancing foe steadily with the hissing stream.

"Which will win? Which can stand the strain longest?" thought the watchful master, determined to let the issue take care of itself until the last moment.

Suddenly Arnold dropped the hose and threw himself in a headlong football tackle onto the nether legs of the furious Domaz. Down they went in a heap. Reinhardt played the hose upon the pair of them for a few seconds, then swung it up into the air.

The fight was over — the victory won. He went over and raised the dripping Domaz I to his feet. Holding out his hand, Bunny bowed ceremoniously.

"You put up a ripping fight and you should have won. Shake hands!"

The other glowered at him, panting. "I'll fix you for this some day, von Bruck,— and you too, Adair," Felix Domaz shouted angrily, his sullen face turning almost black with rage. Regardless of the taunts and gibes of the hilarious schoolboys, the wrathful Domaz I strode off to the gymnasium to change his clothes, his younger brother sulkily following in his rear.

"Well won, boys; you used your heads and treated us to some real team work. Congratulations!" and the laconic master coolly directed the recoiling of the

24 ARNOLD ADAIR, AMERICAN ACE

big hose on its frame as the gratified schoolboys crowded around the victors.

"All right, Bunny?" inquired Arnold, peering into the other's streaming face. Faint blue veins traced themselves under the white skin of von Bruck's temples. Arnold squeezed his arm affectionately.

"Don't I look it? What a mucker that big Domaz is. He's yellow all through. You downed him neat enough, my son. You've got to keep an eye on him though. He'll never forgive us for this."

"Oh, I say, leave him to the school, will you?" said Martin, the Owl, rubbing his hands happily over his wet spots. "Old High-and-Mighty has had his run of things here too long. We must all pull together and try to keep him reminded of the pleasant little fellow he is."

The group of boys nodded their heads delightedly.

"Well, me for a rubdown," said Arnold, moving off toward the gymnasium. "Coming, Bunny?"

"Right, my priceless one," returned Master von Bruck, hastening after his chum. "Honestly, Arnold, I was just about ready to give up if they hadn't."

"So was I, Bunny," Arnold admitted, grinning. "But you know — I couldn't think of leaving the old school with them as champions."

CHAPTER III

THÉ COMPLET

A TABLE for four glistened in the lower corner of the terrace overlooking the lake. More than one group of admiring elders and ecstatic youngsters strolled down to its inviting seclusion, only to find the white-backed chairs tilted up against the edge of the table, and a square card marked "Reserve" warning away the trespassers. The terrace of the Trois Couronnes this afternoon was swarming with famished and jubilant schoolboys.

Many parents had found their way into Verney during the week. The closing days of school always brought together from far-away lands some of the old boys and their families to cheer the home crew on to victory. The regatta on the lake and the presentation of winning trophies were events that a few old grads even crossed the Atlantic yearly to witness.

Straight-limbed lads decked themselves afresh in the whitest of flannels and the tiniest of school caps; their marvelous multicolored neckties flamed from

afar; rebellious heads of wayward hair were slicked and lay brushed flat back, changing completely the late appearance of the familiar patrons of the Verney pastry shops to their smiling proprietors.

For those lucky ones whose mothers and sisters had "come up," a continuous feast was in store. As many chums as the table would hold were crowded in to these "Specials" at the Trois Couronnes. No more thick slices of school bread and butter with tea! Great shining caskets of pastry, many varieties of tempting small sandwiches were spread out on the festive tables. Several kinds of jam and jars of liquid honey sat nonchalantly among the cups. Even a silver tray of bonbons basked trustingly in the open on every table. The old Boys were treating! It was a real *thé complet*!

Arnold and Reinhardt came up the steps together from the lake and threaded their way through the tables.

"Hey, Chingachgook!" "Great old oar you pulled to-day, old Indian." "Give the school cheer now for Adair!" "Now, altogether!" Rah! Rah!! Rah-ah-ah!!! Verney!"

Arnold took off his cap and waved it over his head. A deep blush of pride and gratification climbed up his face and dimmed the glory of his freckles. Nap-

kins waved at him from every table. Grown men stood up and joined in their old-time cheer.

“And good little Bunny! Our great little coxswain! One more cheer for old von Bruck!”

Reinhardt pressed his fingers to his heart and bowed with comic solemnity to the cheering tables. Arnold thwacked him on the shoulder, pushing him forward towards their corner.

“Great, isn’t it, Bunny?” said Arnold, as old Frederick, the waiter, bowed them respectfully into their chairs. “I tell you, there’s nothing I wouldn’t do for the old school. And this is the last of it! To-night we sleep for the last time in the dear old ark!”

“It does sort of put a lump in a fellow’s throat when those beggars give a cheer like that,” replied Reinhardt, looking far away across the lake to the dim outline of the Dents du Midi. “Wonder when we will see the old mountains again!”

“Hello! By Jove, Bunny, look at the pretty girl — coming by the musicians now — there with her mother. Wonder who she is!”

“It’s my mother! Karl wrote me they were coming.”

Reinhardt sprang to his feet and ran forward to meet them. Leading them through the arbor of plane

28 ARNOLD ADAIR, AMERICAN ACE

trees, he advanced on his confused chum, smiling proudly.

"Mother, this is *Arnold!* Elizabeth,—Arnold Adair, of New York, U. S. A."

Oh, the dainty beauty! What a peach of a girl! She floated into the chair Arnold held for her. She looked at him over her shoulder as she thanked him. He determined to run for it if she ever smiled so at him again. From neighboring tables under the trees the less fortunate boys grinned and gesticulated.

And this was "Sis!" Reinhardt had talked for hours with him about his mother, about Echstein, their old Bavarian country house, about his older brother in Heidelberg. But the unimaginative Bunny, in warning him for this climax, had merely told him "Mother and the Kid are coming up for the Regatta."

Arnold sat very erect and searched his racing brain to select an appropriate beginning for this most crucial of introductions.

But she spoke first.

"We have heard all about you, Arnold, and I am so glad to know you. I brought you this!"

Elizabeth extended a small parcel in the silkiest of tissue paper. With blundering fingers Arnold un-

wrapped it and placed upon the table a tiny jar of — grape jelly!

“Reinhardt says you never have had enough grape jam, so I brought you some from Echstein. Do try it!”

“I thank you, very much, indeed. I’m so ashamed of Bunny I don’t know what to say,” Arnold stammered. Ye Gods! Was this gift *his*?

He dared not look at her. She leaned over and touched the red and white ribbons on his shoulder.

“What are these colors? Are all the boys wearing them?”

“No. There are three others on the crew besides Bunny and me. You see, we won to-day, and these are the individual trophies.”

“Oh! You won! I am so glad! And we missed the morning train at Geneva and arrived here too late. It was such a disappointment. You see, we came up from Paris last night, and our horrid train was so late. Aren’t they pretty!” she concluded, proudly surveying her brother’s decorated breast.

“Wo — won’t you wear these?” said poor Arnold, blushing scarlet. “I’d like to give them to you.”

“Here, none of that, Chingachgook! It isn’t done, you know. Sis, you aren’t supposed to take a

fellow's troph away from him. You girls are the limit. Tell her not to, Mother!"

Madame von Bruck smiled at the children across the table. She had the same high-bred features that Arnold loved in Reinhardt.

"Thank you, Arnold, but I do not think the boys would like you to part with your colors, so soon. Reinhardt tells me you really won the boat race by yourself, this morning. You are very strong."

"Reinhardt always says that, Madame von Bruck. It isn't so. He was coxswain of the boat, and he does more than all the rest of us put together. We just won by two feet. Everybody knows the coxswain does the winning in so tight a finish!"

Tea was served. Bunny gorged himself delightfully on cakes and transparent slices of bread and jam. In spite of the motherly attentions of Madame von Bruck and the solicitations of the fascinating little mystery at his elbow, Arnold could not do himself half justice.

Reinhardt regarded the untouched plate of pastry and sighed dismally. "Mother, it's a crime to send those back. If you weren't here, there wouldn't be one left. Arnold is sick or something."

Frederick, the old waiter, advanced to remove them.

"Oh, I say, Freddy, this is my mother. She has come on for the races and got here late. Mother, I want you to know old Frederick. He has a wife and two grown sons up at Glion. He is the best friend Arnold and I have here outside of the School. We've been up there — Arnold and I — to Glion. You ought to see the cakes she makes for us."

The poor boy groaned dismally at the thought of his present incapacity.

"Thank you, Frederick, for your care of my son. He has often written me about you."

"Merci, Madame!" The old servitor bowed. "Monsieurs Reinhardt and Arnold have been very kind to an old man. I shall always remember them."

"He remembers father when he was a boy at school, here. Mother, he is sixty years old," Reinhardt whispered to his mother.

"Yes, I remember Herr von Bruck very well," returned the old waiter. "I was sorry, Madame, to hear of his very sad death. He sat at this very table often, and I served him with his boy friends many times when I was younger myself."

"Mother, do you know, old Frederick gave me fifty francs one day, when he overheard me tell Arnold I was flat broke," Reinhardt said, as the old fellow was moving away with the tray. "Of course

I did not take it, but I wanted to tell you, Arnold and I mean to give him a gold watch with our names on it when we leave to-morrow. We have bought it already. I hope you approve."

"Yes, dear boys, I am sure I approve," replied Reinhardt's mother, pressing her son's hand affectionately and smiling across at Arnold.

"But what's wrong with your hand, Reinhardt? Why did you wince?"

"I jolly well broke my thumb this morning after the race," replied the lad, shooting a quick glance at Arnold. "I punched a big bully that came up behind Arnold and struck him with an oar. It's that hateful Domaz, the arrogant, mean brute. We beat him fairly in a water fight yesterday. He rowed on our crew to-day, and after the race he deliberately struck Arnold from behind. I hate him, and I hate every Prussian I ever saw."

"Hush, Reinhardt! You must not speak so. Oh, I am sorry you have had a quarrel on the very last day of school." His mother looked quickly from one unyielding face to the other. After a moment's silence, she arose and said:

"But now we must go in and change for dinner. Come back and dine with Elizabeth and me, as soon as you can leave the boys. You must come, too, Ar-

nold. I want to invite you to come to Echstein with us for a fortnight before you return home. Will you come?"

"Of course he will come. Hooray for Echstein," shouted Bunny rapturously, his anger vanishing instantly. "But come, everybody up! They are playing the old School Song! Everybody must join in, you know."

Then —

To Verney up! and lift your cup
In dear old Verney's praise; Ay! —
We're comrades here, so one long cheer,
To the dear old Verney days! Hi!

CHAPTER IV

A FORTNIGHT AT ECHSTEIN

THAT happiest of summers of 1911; The country house of the von Brucks lay just over the Bavarian Alps at the very edge of the great Black Forest beyond. Such a huge building of granite for so very modest and unpretentious a little family!

The great tiled kitchen with its sparkling old copper vessels was as neat and spotless as the spacious drawing-room itself. Even the stables at the rear of the house were so clean and capacious, Arnold and Reinhardt conceived the admirable plan of sleeping there to save climbing up the flight of stone stairs to their bedroom and disarranging its neatness. Reinhardt's mother thanked them but declined their offer, which somehow embarrassed Arnold very much.

Every day the boys rode on horseback deep into the surrounding forests; sometimes taking a lunch and accompanied by both Elizabeth and her mother, they spent the entire day reading stories and playing games under the lofty trees. On these occasions Bunny wondered at the extraordinary cleverness of

the young American's horsemanship. Fences, fallen logs and wide ditches were taken with a heedless indifference to concealed obstacles beyond — a recklessness altogether apart from Arnold's usual behavior when Bunny and he were alone. Elizabeth, though a year younger than Arnold, was as fearless, and mounted on the fleet Charlemagne, was every bit as eager to 'op the 'edges and to pick the breakneck courses in a furious follow-the-leader.

Fragrant pine needles carpeted their more tranquil paths through the long, branch-covered cathedral aisles of the big forest. For miles and miles the tall tree trunks, free from branches for a hundred feet or more above the ground, opened up a vista of beauty before them as they advanced deeper into the vast forest. Every expedition had the same object when Elizabeth alone was with them. After continuous turnings and twistings through the close growing fir trees until both boys were perfectly willing to admit they were hopelessly lost, they would bet recklessly with "the Kid" that she could neither tell the points of the compass nor find the way home. Pointing her riding crop after a moment's reflection, she would decisively name that direction north, and set off with a loose rein. The sun did not penetrate so deep, and no clue to the directions was apparent,

but as soon as old Charlemagne got his head he hastened unerringly homeward to his stable door.

"I have a marvelous instinct in finding directions, Arnold, really. Even my big brother, Karl, admits I am a wonder. You boys mustn't ever go so far from home without me, remember. It would be more difficult perhaps for me to find you if you get lost."

"Beth, you give me a pain," retorted her irritated brother, lugubriously contemplating his afternoon tea without cakes for the third time running. "It's just pure rotten luck. I'll get you so good and lost next time you won't get home in a week. I know the place to take her next time, Arnold."

"Oh, la-la!" sang the laughing girl, as she slid off her saddle. "Poor Bunny! Does the little boy want some tea cakes? I have a boxful in my desk."

"No, he doesn't," replied her perplexed brother, winking nevertheless at Arnold. "We're cutting out all that stuff, anyway. Come on up to the tennis court, Chingachgook. We'll have one set before tea."

"Oh, you wretch!" cried Elizabeth suspiciously. "I believe you are bribing old Martha to give you cake. I shall tell mother to forbid her."

She stood imperiously switching her riding skirt with her crop.

"Look at me, Arnold Adair! No! Look right straight square into my eyes! There! Ah! You are ashamed to," she concluded triumphantly, as she pointed her small gloved finger at the blushing boy. "I didn't believe *you* would nig, Arnold. For shame — both of you," she taunted. "I shan't bet with you again."

"Well, you needn't," said Reinhardt briefly. "Let's go up and have a chat with old Martha, Arnold. Come along."

"I hope they choke you," called out Elizabeth, as she walked away to the house. "I was going to tell you how I find my way home — but now I shan't," and she threw her arms impulsively about the leaping collie at her side and buried her piquant little features in his white ruff.

"Gee, Bunny, I don't want any cakes," remarked the perturbed Arnold as they crossed the tennis courts and proceeded steadfastly towards the kitchen end of the house. "It doesn't seem just square."

"What's the matter with you?" demanded Reinhardt, standing still with an aggrieved expression on his face. "Don't you mind *her*. I know her. She's got some way of beating us out of those cakes.

I don't know what it is, but it isn't fair — I know that. We'll find it out — some day."

"I know —" Arnold began slowly, and stopped, coloring deeply.

Reinhardt whirled on him. "You know! Then it is a trick. How does she do it?"

But Arnold held his tongue. Looking across the lawn, he beheld Elizabeth with her slim arms still about the beautiful dog, her cheek caressing his noble head, her eyes undeniably smiling into Arnold's.

"I thought maybe I knew — but I don't really," said the happy youth. "Come on. Let's play tennis."

That evening friends came in to dinner, and Arnold and Reinhardt were bidden to dress up their nicest for the occasion.

"I've told Anna Ruthlen what a handsome fellow you are, Arnold, and she's very curious to see you. So do your best," said Elizabeth, shaking a finger at him warningly. "There are two other girls coming too. One of them likes Reinhardt very much, and Reinhardt likes the other very much. Don't you, Bunny? Oh, I could tell you something you'd like to hear, Reinhardt, but I promised her I wouldn't." The laughing girl disappeared up the broad stairs, leaving confusion in her wake. The two boys were

both silenced, neither caring to trust himself to any retort that, under the circumstances, seemed just appropriate.

"What are you going to put on?" inquired Arnold casually, as they made their way to their rooms together.

"Oh, I don't know," returned Reinhardt with altogether too studied an indifference. "Any old thing'll do. Flannels, I guess. This isn't a real party, you know. It's too hot to put on much dog."

"Any fellows coming?"

"Yes. Two or three of the Ruthlens are coming, and Mark Shaefer. They all play flutes or bass drums or horns or something. After dinner we'll have a big musicfest and that'll be fun."

Reinhardt himself was extraordinarily proficient on almost any musical instrument. Elizabeth too was an accomplished violinist and 'cellist, and night after night Arnold went to sleep at Echstein to dream he was singing in opera, his voice led on and sustained by the caressing undertones of her sobbing strings.

Arnold did not know he could sing until he found himself among his German friends, who sang aloud in just as matter-of-fact way as they spoke. Studiously and without embarrassment then, the lad joined

in with them as Madame von Bruck, singing too, struck out thunderous accompanying chords on the piano.

Old songs that his father loved, "Her Bright Smile Haunts Me Still" and "In Happy Moments Day by Day," which Arnold always associated with Judge Adair's late Sunday shaving in his bathroom at home, were as familiar to the von Bruck family as the Meistersinger Prize song and the tender Loreleis.

The musicfest was a whirlwind success. Arnold was incredulous at first when his ears drank in perfect and easy harmony instead of the boisterous blaring he had anticipated. Led by Mark Shaefer, the dozen boys and girls, all playing without reference to notes, swung into perfect rhythm on "Mandy Lee, I Love's You, 'deed I Do," which they played first, in honor of the visiting American.

These boys and girls seemed natural-born musicians. They played opera airs, ragtime songs, and Strauss' waltzes with equal abandon, and Arnold learned to his amazement they had never practiced together nor had even studied especially to learn their vast repertoire. It apparently came as naturally to them as baseball comes to the American.

For the first time in his long visit, Arnold felt strangely out of it as he listened to the music, and

realized he alone was unable to take his part with the performers. Madame von Bruck crossed the room and sat down by the boy's side.

"Arnold, dear boy, I shall be so sorry to lose you. We shall all miss you very, very much."

"Thank you, Madame von Bruck. I must leave on Saturday. My father cabled me."

"Yes, I know, and I received information from my agent in Manheim this evening that he had secured a stateroom for you on the *Rochambeau* sailing from Bordeaux next Saturday. But I have more news for you, too. You know my nephew, Philippe Pieron?"

"Oh, yes, indeed. He took Reinhardt and me for an aeroplane flight." Arnold's eyes shone brightly.

"Philippe writes me — here is his letter I received to-night — asking me to let you come to spend a day or two with him before you return to America. He says he will take you from his home in Tours to Pau in his aeroplane, and you can see all the machines at the flying field there at Pau. Would you like to go?"

"I — oh, thank you — it is splendid of Philippe. I want very much to go — and I want to stay with you as long as I can, too. I never dreamed of such luck," Arnold stammered in his agitation. As the

music ceased he sank down again beside Madame von Bruck, who slipped her arm through his.

"I wish you always to think of this as your European home, Arnold. I know your own dear mother is anxious to have you home, and I must let you go. But you will always remember us?"

Before Arnold could find words to answer, he saw advancing towards them the girlish figure of Elizabeth, a dish of candies in her hand.

"See what I've saved for you, Arnold — some Verney chocolate! But what has happened — Arnold, you are almost crying."

"Hush, Beth," said her mother fondly, drawing her daughter close to her side. "We were talking of Arnold's going away. Your Cousin Phil has invited him to come to-morrow to Tours and to take an aeroplane flight with him."

Elizabeth's gaiety suddenly vanished. She sat down quietly beside Arnold and avoiding his glance, said softly, "And you are going to-morrow?"

"I don't want to go, Beth. Don't you see I am almost in tears at the thought of it? But I've got a chance to fly! Just think of it! And a day or two at the Pau school. Isn't it ripping of Philippe to ask me?"

"What's that?" said Reinhardt, overhearing Ar-

nold's excited exclamations, as he with several others approached the three on the window seat. "Philippe's asked you to stop at Pau?"

"To fly to Pau, Reinhardt — from Tours; the letter just came," his mother announced, looking proudly from Reinhardt to his chum. "If Arnold must go, it is nice he has such a pleasure to anticipate. Philippe is really the only aeroplane pilot on earth to whom I would entrust my boys."

"Old Dependable! What a stunning thing for Phil to do!" spoke Bunny generously. "I'll motor you to Manheim in the morning for the eight o'clock train, Arnold. That will get you there before night."

But a few minutes later, as Elizabeth and her brother stood beside Arnold waving last good-nights to their departing friends from the lower steps, mountainous surges of homesickness overwhelmed him at the thought of his leave-taking on the morrow.

CHAPTER V

THE VETERAN OF SEDAN

THE afternoon train drew into Tours a little late, and Arnold impatiently waited for the exasperating guard to unlock his compartment door. Handing out his luggage, he sprang down after it, and directed the shuffling old porter to get him a taxi as quick as possible. Before he was across the platform, however, a resounding Verney thwack on the back faced him about, and he beheld Philippe Pieron, his hero and his delighted host, standing pipe in mouth at his side.

“Glad to see you, young ’un. How’d you leave the Echstein people?” greeted Pieron, putting an arm around his young friend’s shoulders and squeezing him affectionately.

“Oh, very nicely, thank you, sir,” replied the lad, tipping his cap politely as he shook hands with the “old boy.” “They sent you many kind messages, sir, and wished they all were coming. Bunny wished it especially, sir — and Elizabeth,” added Arnold coloring a little. “But it was awfully good of you

to ask me. I don't wonder they both wanted to come too, sir."

"We'll just drop that 'sir' now, young 'un, if you please. Understand?" said Philippe, squeezing Arnold's arm roughly.

"Yes, sir," replied Arnold.

"How old are you?"

"Seventeen and a little over."

"Well, I'm only twenty and a little over. So now we're Philippe and Arnold, or Dependable and the young Mohegan, or any other equally hilarious title we feel we need. But come along — get into my car. Fetch the luggage, my old one," he said to the attentive, grinning porter, and arm in arm they moved down the platform to the street below.

"Your boat sails Saturday, Arnold?"

"Yes, from Bordeaux."

"Good. We'll send your traps ahead, and I'll take you over to the flying field at Pau in my machine. Would you like that?"

"Better than anything else in the world," returned Arnold rapturously. "You are awfully good to me, Philippe. I don't know how to thank you."

"Nothing at all, Arnold. We'll play around there two or three days, and you can see all the flying machines you want. Do you intend to learn to fly?"

“ Yes ! ”

“ That’s the stuff. I knew you would soon as I laid eyes on you there on the old Verney field. That’s what I asked you over for, mostly. Where are you going to college ? ”

“ Harvard. I enter this fall in the freshman class.”

“ Sorry about that, young ’un. I’d like to keep you here.”

They were in the motor now and were slowly moving through the delightful old streets of Tours. The quaintly picturesque houses and gardens lay half hidden behind high stone walls. A mysterious quietness pervaded the ancient cobblestones and bridges. Farmers’ carts and fashionable limousines elbowed each other familiarly in the busier cross streets. Pedestrians walked slowly and conversed leisurely, one with another, under the canopied walks in front of the shops. Arnold noticed the playing children in their short aprons and wooden sabots shouting and even quarreling in subdued gentle tones. “ A restful jolly old port to come to,” thought Arnold; “ I’d like to live here.”

A couple of miles out of town they turned off the old highway into a long driveway through rows of poplar and mulberry trees, skirted hay fields, orch-

ards and vineyards, and finally emerged into an ancient venerable courtyard completely surrounded by a long disused moat. Servants appeared and smilingly welcomed the young lad as they seized his small luggage and hurried it into the house.

"Stay in, Adair," directed Philippe at the wheel, as Arnold prepared to step out. "We've got just time enough to run around to the hangar and see if the old Farman is in good shape for to-morrow.

"We'll have to get away early," went on the air pilot, as he circled the car neatly out of the ponderous stone gate and across the drawbridge. "It isn't a long trip, but we get better air early in the morning."

"Have you made this same flight before?" inquired Arnold, as the roadster skimmed around the curving lanes on the smooth hard surface. "Over to Pau, I mean."

"Yes, a score of times. It's three hundred miles or so. Easy country to come down in if your engine fails. Plenty of smooth landing fields. You'll meet some of the best aviators in France at the Pau field. Corking fellows they are, too.

"It's a gentleman's game, Arnold," continued Pieron, throttling down his car to a conversational speed. "And there are wonderful possibilities in it. It's a brand new science. Nobody knows any-

thing about it — comparatively, I mean. When you think of what the aeroplane will do in war time, it simply upsets all old ideas of war.”

“War!” ejaculated Arnold in surprise. “There won’t be any more wars, do you think?”

“Nobody can be certain about that,” responded his new friend gravely. “It’s better to be prepared for it, anyway. If war comes, the country with the best aeroplane service wins — that’s sure.”

They entered a broad parade ground and ran across its length to a small group of wide-doored barns, facing the field. Jumping out of the machine, Arnold followed his friend through a small door in the first hangar. Inside the room three or four mechanics in greasy overalls were working over a dismantled aeroplane engine which was resting on a long workbench that ran the entire length of the room.

In the center of the floor, its tail lifted up and supported in a horizontal position by a scissors block, the object of Arnold Adair’s countless dreams crouched ready for a spring into the beckoning space. It was the same machine that had carried him circling over the deep waters of Lake Geneva, over the yelling waving group of his awe-struck schoolfellows who were gazing upwards from the terrace of the Trois Couronnes.

Arnold assumed the knowing airs of an aeroplane expert as he walked about the gleaming planes under the gaze of the respectful workmen. With a brief professional survey, he turned his back nonchalantly on the wonderful toy and joined Philippe at the bench.

With a few further directions to the mechanics, Philippe nodded to his friend and they departed. Arnold did not permit his eager eyes to stray again towards the beloved aeroplane. To-morrow, when he was alone with Philippe, there would be time enough for that. Philippe, reading his thoughts with correctness and satisfaction, smiled quietly as he closed the door and followed Arnold to the car. He had made no mistake. Arnold Adair was destined to discover he was a natural-born fier.

Arnold was presented to old General Pieron and Philippe's gentle mother when he came down to dinner that evening. The dinner was very stiff and formal, the talk being mostly between Madame Pieron and Arnold and her son. The stern old General, Philippe's father, turned his fierce bright eyes frequently in Arnold's direction and occasionally smiled grimly at Arnold's naïve reply to his infrequent gruff questions.

Madame Pieron inquired very particularly about

her sister's family at Echstein and listened with much interest to Arnold's description of his pleasant visit there. He spoke of their frequent horseback rides together, their evenings of reading aloud and singing together around their piano.

"Reinhardt, I suppose, will join his brother Karl in the Military," boomed the old General from the head of the long table. "Do they talk of sending him to Heidelberg?"

"Yes, I believe they do, sir," replied Arnold. "Reinhardt enters the University in the fall. Karl has another year there. I have never seen Karl, sir."

"Karl was at Verney with me," Philippe interposed hastily, seeking to change his father's train of thought. "Father, it would have done you good to have seen the old school with me. You and I must go back together next June."

"Next June!" growled the old veteran. "Next June will find me fighting the Germans at Sedan again, sir. Those villains will be on our backs again before our country wakes up. Don't interrupt me!" he shouted, seeing his wife's entreating, restraining gesture. "I know what I am saying, and I've said it a hundred times before. We are imbeciles — blind, foolish, incapable imbeciles. God help France when

the invading alarm is sounded. Your nephews go to Heidelberg, do they? What is Heidelberg? A training school for German officers! And your sister is French!"

General Pieron pounded the table in front of him savagely with his fist and continued vehemently.

"Why do they train? Why does every German boy spend two solid years in a military camp? Who have they got to fight except us? Haven't they threatened and boasted they will swarm over our borders like locusts when they are ready?"

Arnold averted his embarrassed gaze while Philippe and his distressed mother attempted to soothe the General into quiet. His passion had thrown the distinguished old veteran of France into a violent fit of coughing. His son, with the aid of the butler, assisted the implacable old man to his bedroom.

Madame Pieron, with a suggestion of motherly intimacy that won Arnold's complete devotion, turned to him her troubled face and said:

"Ah, Arnold! We rarely can have guests now for fear of the General's wounding their feelings with his violent denunciation of the German peril. He blames every one for not seeing it. With you, I am sure I need not conceal my anxiety over his unfortunate weakness. As the General grows older, he

imagines the direst possibilities of trouble with Germany. I shall never speak again of my dear sister's family at Echstein for fear of exciting him to wrath. You must forgive him, Arnold."

"Indeed, Madame Pieron, I am so sorry I spoke as I did. But Philippe said something to me this evening about aeroplanes and war. Is there, then, any danger of war?" Arnold stared apprehensively at the sad face before him as she answered:

"God alone knows how soon it is coming, my dear boy. But there are many indications that it cannot be far off. And my poor sister — and Elizabeth! They both love France better than Germany. Come," she added, rising and smiling bravely as she spoke, "we mustn't make ourselves unhappy over just possibilities. Philippe will join you for some port directly, and if you will pardon me, I will go to my husband."

Left alone at the great dining table in the center of the high domed hall, Arnold sat in his chair, thoughtfully regarding the portrait of an ancestor of the Pieron house, mailed and helmeted, the gleaming sword of war in hand. The grave countenance of the Jeanne d'Arc soldier, bore a striking resemblance to that of Philippe Pieron.

Philippe found his young guest in deep contempla-

tion of this portrait when he returned to the table. Pouring out a glass of port and shoving the decanter across to Arnold, the "old boy" rose to his feet and extended his glass.

"To the old school, Arnold."

CHAPTER VI

A CROSS-COUNTRY FLIGHT

SWATHED to the top of his head in many layers of heavy clothing and furs, Arnold took his seat in the Farman biplane, adjusted the safety belt around his middle, and prepared his field glasses for convenient use. Heavy morning dew sparkled on the short grass as the first streaks of the rising sun shot across the wide parade ground from his left.

Philippe leaned over from his seat in the rear and slid a thermos bottle of hot coffee behind Arnold's elbow. The engine was quietly ticking over. The two mechanics stood rope in hand, ready upon signal to jerk away the blocks. Behind them gathered a group of curious men and boys, staring fearfully at the winged monster, so soon to soar heavenward with its human burden.

Suddenly the engine roared in dead earnest, the outline of the lagging propeller became lost in furious revolutions and the body of the aeroplane trembled in its eagerness to leap into its element. With an upward thrust of his arm and a nod of his head,

Philippe signalled to let go. Obedient to the control of its master, the powerful conqueror of the air sped lightly over the grass, lifted its weight imperceptibly from the supporting wheels, and buoyantly breasted the onrushing wind. Arnold turned and waved a last good-by, to the fast retreating knot of watchers. The ancient Cathedral of Tours loomed up beyond in its early morning grandeur. The smiling valley of the Loire widened and flattened as the aeroplane rose, until the checkerboard landscape was unbroken save by the white streaks of highway and the gleam of the numerous tributaries to the Loire, which, narrowing out in the distance, disappeared in the valleys of the Cher, the Indre, the Creuse, and the Vienne.

The ardent enthusiasm of the American lad was too big to be affected by considerations of cold, fatigue, dizziness, or even danger. His imagination had long since discounted these terrors. In fact, the whole possibility of misadventure had been dismissed forever in his mind when he first considered the marvels of aviation. "Others have done it, so why should we be afraid?" had summed up to Arnold's complete satisfaction the whole gist of the matter.

Forty miles away to his right the rising sun lit up the white buildings of Angers. Beneath him, frequent clusters of tiled roofs indicated small villages

and towns, too indefinite to permit his identification upon the small roller map above his knees. The altimeter indicated seven thousand feet. He leaned over the edge of the fuselage and studied the flat landscape. What a tiny playhouse they were passing. The white stone borders of the driveway outlined a path scarcely wide enough to comfortably set foot in. The outbuildings resembled houses built with dominoes. There was a tiny stream with a tiny bridge, leading the straight white highway across it. The river must be in a depression, yet the landscape appeared perfectly flat. Neither hills nor valleys then could be distinguished from above.

Suddenly Arnold's roaming imagination leaped ahead to war. Aeroplanes in war!

Philippe had said aeroplanes would absolutely dominate future wars. With the table separating them last night, Philippe had talked long of what the air pilots could accomplish to repel invading enemies — might hurl exploding bombs upon them, might blow up the bridges behind them, might even count the troops and foretell their plans of conquest!

And after their talk, Philippe had taken him to his bedroom where, tacked to the wall, a huge map of France lay spread.

From the Mediterranean to the North Sea but

two avenues of approach lay open to a possibly belligerent Germany. One lay through Belgium, the other through Luxemburg. Fortifications, both French and German, faced each other across the borders. These were indicated on Philippe's map by colored pins. Roads, rivers, forests, and mountains along these borders were as familiar to Philippe as the doors, windows, and furnishings of his bedroom.

"And here is Sedan, where my father surrendered." Philippe placed his finger upon the map. "Do you wonder I take time to study this section of my country?"

Old General Pieron perhaps, then, was not an erratic old fool, but rather the clear-sighted and apprehensive man of war, whose training and instincts permitted him a vision of affairs military clearer than seemed possible to a care-free public bent on peace and happiness.

And Philippe's unusual gravity and determination in his queer preparations for war — Phil was his father's own son. He inherited suspicions of German hostility; his mind ran to military defenses, and he was studying this wonderful new air science, seeking to adapt its evolving possibilities to aid France in eventual wartime, even now in peaceful 1911.

A nudge on the shoulder brought Arnold's ranging thoughts suddenly home. He turned and observed his companion pointing away to the west. The blue Atlantic lay spread out to the edge of the horizon from a point scarcely thirty miles away. Arnold glanced at the clock on the dashboard. They had been flying steadily southward from Tours for an hour. Seventy miles per hour, Philippe had told him, was the topmost speed of his plane. In the slight following wind they may have covered eighty or ninety miles at most. They must be half way to Bordeaux. Arnold turned his map and studied the coast line and railroads indicated. Ah! Bordeaux would be easily identified, once visible, both from its size and its position at the small end of the bay. It was not yet within sight.

Conversation was impossible between the two passengers. Even turning about to look behind him, brought Arnold's head out of the narrow shelter of his windshield into the uncomfortably cold rush of air. He felt for the bottle of coffee, unscrewed the cap, and filled it. Extending it back towards Philippe, he was startled to see the sweeping blast of air lash the hot liquid from the shallow cup and spray it along the length of the machine.

Philippe shook his head laughingly at his compan-

ion and held up to view his own thermos bottle. Somewhat discomfited, Arnold filled his cup again and leaned closer into the shelter of his windshield to drink.

Suddenly, just as his lips met the hot coffee, the bottom seemed to drop from under him. He quickly clutched the side of the cockpit and raised himself up. The aeroplane had left her even keel and was tipping horribly to the left. Before he had time to look around at the pilot, however, she again lurched back into her upright position. Firmly resolved to betray no unprofessional interest in such a casual maneuver, Arnold again filled his cup and leaned down to drink it. This time the machine as suddenly swooped down to the right, burying Arnold's nose deep in the steaming beverage.

He looked around indignantly as he dried his face with his glove, and then he met the pilot's grinning look of inquiry with the abashed realization that Philippe was simply putting him through a bit of timely initiation. He carefully refilled his cup for the fourth time, held it cautiously sheltered from the wind with his hand, drained it, and putting his thumb to his nose, wiggled his gloved fingers triumphantly at the steersman. Philippe threw back his head and laughed. "Good-natured little beggar and plenty

enough pluck!" thought Philippe Pieron, grinning to himself. "I'll show him the loop to-morrow."

The lovely harbor and spires of old Bordeaux were soon below them. Philippe cut off his spark and shot down to nearly one thousand feet as they circled above the Cathedral Plaza, where hundreds of white faces could be seen gazing up at the marvelous spectacle. Arnold leaned far out and waved his hand. Wheeling with beautiful precision, the imperious aircraft turned her nose toward the distant Pyrenees and again resuming her methodical and musical roaring, swam away towards her destination.

But for one slight mishap, the entire journey would have been accomplished without stop. An hour or so beyond Bordeaux, the rhythmical beat of the engine became noticeably imperfect. They were flying at an elevation of less than a mile, and both sea and mountains were distinctly visible about them. Philippe glanced at his revolution counter and discovered the engine was unmistakably weakening. He was determined to reach Pau without a stop, if possible. Every trick of nursing was tried. He cut off his engine, nosed down his machine, and slid earthwards a thousand feet at tremendous speed. Switching on his engine deftly, he flattened out and began to climb. But as soon as the engine felt the

burden, she dejectedly relapsed into half-hearted effort again.

A landing was inevitable. Quickly scanning the landscape, the pilot selected a good-sized town some miles ahead, and with fastidious caution, prepared his descent. Three complete spirals were completely over a fair appearing pasture at the farthest edge of the little city. It was free from trees and wires and cross fences. The ground lay smooth. Swooping down low for a final survey, Philippe flew over the field at less than a hundred feet above the grass. Evidently satisfied with the situation, he circled about, cut off his engine, and gently ran along the field until the momentum died.

The boys climbed out of their seats and looked about them at the unsuspected quaintness of the architecture. Neither Arnold nor Philippe had the faintest idea as to which city of the western coast of France was being so unexpectedly honored by their presence.

After stamping and cuffing about for a few minutes to warm up their limbs, they proceeded to an inspection of the engine trouble.

"Spark plugs first, always," said Philippe, spreading out his tools on the grass. "Rotten luck to come down like this. Another hour, and we'd have

made Pau. Hold these tools for me until I get up, young 'un.

“Natural-born guesser! Never hit it closer in my life. Wire broken. Fire me the wrench. In two minutes we will be out of here just in time to miss the welcoming embraces of the city delegation yonder.”

In the distance could be seen racing boys, swarming over fences and hedges, pouring in towards the resting aeroplane from every direction.

“Jump in my seat and open the throttle, Arnold — quick,” said Philippe, fastening the tools in their box and moving back to the propeller. “Is the switch off?”

“Switch is off,” responded Arnold, pride and nonchalance struggling in his voice.

After half a dozen swings downward with the propeller, Philippe called,

“Now, switch on?”

“Contact!” yelled Arnold. A thrill seized him. Suppose Philippe failed to get in before the machine got away. By Jove, he wished it would happen so! He could stop it easily enough, and he would like to try the experiment of handling the monster aircraft alone.

But the airman was too deft to permit such a hap-

pening. Running around the end of the buzzing propellor and projecting wing, he seized the spar near his seat and climbed aboard before the machine began fairly to move. Arnold quickly slid into his own seat. Sweeping ahead down the long pasture, the refreshed motor bellowed out a joyous hullabaloo, staying the onrushing village boys in their mad flight and denoting to the gratified Philippe the restoration of its complete powers.

To this very day neither Arnold nor Phil Pieron know the name of the village which extended to them its brief hospitality on that sunny morning in July, 1911. An hour later the two friends taxied across the smooth flying field at Pau and came to rest before the door of Pieron's hangar.

CHAPTER VII

AN UNEXPECTED REUNION

FREQUENTLY during the two years following, while America tranquilly slept over her aeroplane development, did Arnold Adair recall the interesting pleasure of those two days at Pau — Pau, the foremost aeroplane center of the world, the Mecca of every aviation enthusiast of the world. Here was the very field, the very hangar, from which the immortal Wright brothers had flown for the first time in sight of an incredulous world. Here were gathered all the great airmen from every quarter of the earth, laboring to perfect this man-made secret of flight.

Among these famous fliers, Arnold had ascertained, to his great delight, that his friend Philippe Pieron occupied a distinguished and distinctive position. Quiet and self-effacing, young Pieron neither sought nor gained any popular recognition. He had performed stunts and had broken records both in altitude and long-distance flights, which were never tabulated and never even mentioned by Pieron himself,

except by way of explanation. His interest, heart and soul, was engaged in the mastery of this newest science of mankind, and his achievements were but the milestones of a secret and a vastly more involved problem. Probably no one knew the extent of Philippe's investigations nor the results of his various experiments in this hitherto undreamed-of arm of warfare. Possessed of unusual wealth, the young enthusiast maintained both at Pau and at his home in Tours, a workshop employing the most expert draughtsmen, engineers, and mechanics in France. Not a few struggling aeroplane manufacturers received his financial aid and his scientific advice. Not a new design of aeroplane or aero engine appeared in the narrow world of aviation but quickly passed under his scrutiny. For some mysterious reasons, Pieron did not desire recognition of his interest nor public appreciation of his prowess as an exceptional pilot.

"Old Dependable, indeed!" Arnold often thought. "Nobody knows how truly big Old Phil really is. He's a bit cracked on the subject of war, but he is a wonderful fellow."

On his uneventful sea trip home from Bordeaux, Arnold framed in his mind the knock-out arguments he would present to that coldly calculating legal

mind of his old pal — his father — on the subject of the absolute and obvious safety of flying.

But as the event proved, that unemotional legal mind was the one fault his generous father possessed. He simply could not see the plain fact that it was impossible to fall, and as for taking a flight himself to discover how perfectly safe it was, he merely replied he would have to be mesmerized first.

So instead of flying Arnold was compelled to spend his idle time in Harvard constructing aeroplane models and correcting the camber of their wings and their angle of incidence. He organized an Aero Club consisting of a total membership of four embryo enthusiasts. He collected every scrap of information published on the art of aviation and subscribed to all the technical magazines.

The following summer he spent idling about the resorts at seashore and mountains with his family. At infrequent intervals he received letters from his friends in Europe and immediately answered their inquiries and assured them of his hope of returning there for flying instruction at an early date. As for flying in America, the birthplace of aviation, only the western county fairs and an occasional graphic catastrophe afforded evidences of its still lingering existence. Arnold yearned steadily for a revisit to Pau.

Another year passed, and the unnatural parent, as his son laughingly called him, still obstructed the irresistible desire of the aspiring air pilot. Then broke the long night in a manner miraculous and sudden. Arnold had the rare and persuasive personality of Philippe Pieron to thank, for no other influence upon earth, he was afterwards convinced, could have induced the inflexible Adair, Senior, to alter his established opinion concerning aviation.

Shortly after the close of his sophomore year, the two devoted pals, Arnold and his father, hurriedly booked passage for Europe. Two days crammed with business were spent in the office of a Berlin banking house, Arnold acting as interpreter for his father, and occupying his mind wholly with the business in hand.

Having concluded their affairs, they packed their bags and were stepping out of a taxi at the station, when miraculous chance threw Philippe Pieron full into Arnold's arms.

Philippe had just arrived in Berlin, it appeared, and still intent on his quest for aeroplane tests, was come to witness the flights at Spandau on the morrow.

"And how is the war coming on, old one?" Arnold mischievously inquired, after he had presented the

old boy of Verney 1908 to the old boy of Verney 1878, and they were crossing the square to a neighboring café.

"Can't you stay over another day and see the flying?" Phil asked, ignoring Arnold's question bluntly.

"Can't. Give a million if I could, but we must get to London and home forthwith. How is the General? Does he still believe there will be war?"

The three were seated together about a marble-top table facing the splashing water of the near-by fountain. They had a scant hour before the departure of the Paris train. A military band was playing peacefully in the pavilion, and the sidewalks and the square were crowded.

"General Pieron, my father, is dead," replied Arnold's friend.

"Oh, I am sorry," Arnold returned quickly. "Please forgive me for speaking as I did, Philippe," he entreated.

Judge Adair expressed his sincere sorrow at this sad intelligence, and Philippe acknowledged their sympathy gravely.

"Of course, my father may have been wrong," said the son, "but he believed in being prepared."

"There are indications of war, then?" the Judge inquired searchingly, though choosing his French

with some difficulty. "European affairs seem very stable and peaceful to us in America." And the older man outlined at some length the results of the recent Balkan settlements.

"Oh, I dare say actual war is very remote indeed, sir," returned the young Frenchman, laughing frankly. "At the same time *some* nations believe in being prepared for the worst," and Philippe nodded ironically at a quartet of insolently swaggering Prussian officers advancing four abreast along the crowded sidewalk towards the pavilion.

"And how about your flying, Arnold? There is so much for us to talk about." Pieron went on in a low voice, turning away his head as the officers paraded towards them, pointing out daintily their highly polished boots and twirling with comical seriousness their identic waxen mustaches. "Have you a good machine of your own?"

But Arnold had sprung to his feet and had smilingly advanced to meet the staring officers.

"A good day, Felix," he cried in German, as he recognized beyond a doubt his old schoolfellow in uniform. Lifting his hat courteously in German fashion and extending his hand to the last of the four officers, Arnold went on cordially. "This is a great pleasure. Come. Let me present you to my father

and Old Dependable, Verney, 1908, who are here," bowing towards his table.

For an instant Felix Domaz paused with a look of startled surprise on his face. His three companions surveyed Arnold from head to foot, then turned and regarded Domaz. The latter, with blackening face, spat forth an amazed oath, resumed his insolent stride, and brushing past the outstretched hand of his old classmate, he shouted:

"A swine of an American! Get out of my path!" and twirling his uptilted mustache-end savagely, he joined in the contemptuous laughter of his companions.

Before Arnold could recover his outraged senses, Philippe had his arms firmly about him.

"Steady now, young 'un," he continued, pushing him towards the table. "This is no place for a row. Get back to your seat."

Burning with mortification and fury, Arnold suffered himself to be led away. His father stood in puzzled wonder, looking with astonished eyes from Philippe's calm countenance to Arnold's dejected figure.

"What's this, my boy? Who are those men? What did they say?" he ejaculated in English.

"Let us walk to the station, sir; it is most time for

your train," interposed Philippe, dropping some coins in the saucer, and beckoning to the waiter. "Those gentlemen who passed are the present rulers of this peace-loving land. It is said that they covet the earth." And looking thoughtfully after the departing officers, he added, "That rare and priceless 'kulture' of the Prussian!"

As they moved away, Arnold related briefly and sadly the history of the quarrel at the old school between the Prussian Domaz and himself. Both his father and Pieron listened silently until Arnold concluded.

"I could not believe he would treasure up a boyish grudge two long years. Why, there's not another Verney man in the world who would not let by-gones be by-gones simply for the sake of the old school. He is a disgrace to Verney!"

"If I had understood his remark to you, my boy, I should have counselled you to strike him down on the spot," said his father indignantly. "But now that I understand the former circumstances, I agree fully with you," continued the Judge. "We mustn't attempt to cleanse the solitary piece of Verney's dirty linen on the public streets of Berlin."

"Come, Arnold, tell me about your flying," said

Philippe, passing an arm across his friend's shoulder.

"Have you your own machine yet?"

"No, not yet," Arnold returned, smiling quizzically at his father. "The 'old boy' isn't quite converted — yet."

Judge Adair stopped and leaned towards Philippe. "Tell me, Pieron," he said, "don't you consider it a deadly business, this flying. Aren't you bound to come a cropper eventually on these erratic machines? I cannot bring myself to consent to Arnold's so risking his life."

Philippe paused respectfully. Then with eyes steadfastly meeting Judge Adair's, he replied slowly:

"I consider flying the most useful and the most sporting occupation in the world, sir. It is a new science — just now in its infancy — but it will become greater than railroading when it is understood. Arnold is a natural-born airman, to my mind. He is alert, imaginative, and daring. But he is cautious and painstaking, sir. I never knew of such a combination coming a bad cropper. And it's a gentleman's game, sir."

"Thanks, old fellow," said Arnold, lifting his hat and bowing. "Have something on me." Then he added, replacing his hat, "A Gentleman's Game!

And as father always used to tell me, 'Be a gentleman, no matter how painful.' "

As they were getting into their bunks that night on the swift Paris express, the old boy of Verney '78 turned out the light in the compartment and called out in the darkness to the representative of Verney '11.

"Who teaches flying in America?" he demanded gruffly.

"A corking fine instructor is at Garden City, father," cried Arnold, tumbling out of his bunk. "He's taken me up twice. He says I can get a pilot's certificate in half a dozen more lessons. Only a dollar a minute. That's awfully bully of you, father. I can learn flying before Harvard opens this fall," and Arnold threw his arms about his father in the dark and hugged him rapturously.

"Well, we will have to see about that," said Judge Adair, weakly realizing he was already hopelessly committed. "Young Pieron, though, who is a very discerning fellow, said himself it was a dangerous game."

"Pardon me, father; a gentleman's game, I think he said, sir. Won't mother and Alice be pleased though. Oh, thank you, father. Good-night, sir."

CHAPTER VIII

THE BEGINNING OF THE WAR

AND thus it was that Arnold learned to fly and actually found himself the proud possessor of a "Curtiss" before he went back to Harvard for his Junior year. Every available "flying day" Arnold's friends knew they could find him about or above his Garden City hangar, and more than one of his close friends were tempted into the game themselves after two or three "joy rides" with the enthusiastic young airman.

Soon exhausting the air possibilities of his own country, Arnold was impatient to fly again at Pau. There he would see his old friend, Philippe, and from him Arnold could learn the very latest developments in European aeroplanes and find answers to many questions that were now puzzling his brain.

To his great joy, he found his proposal for a trip across the ocean met with the approval of his mother and father. The whole family would go over for the summer as soon as Arnold finished the June examinations. They would take the touring car with them

and go by the Mediterranean direct to Sicily. It was a trip both his mother and Alice had long been planning. Arnold would be their chauffeur.

The usual unexpected stress of business affairs, however, prevented Judge Adair from accompanying the family to Italy for the summer of 1914, as it usually did at the last moment.

Leaning over the boat rail, Arnold and Alice waved good-bys to their father, who stood surrounded on the wharf's end by a score of more of their friends, while young Adair I and younger Adair II were kept fearfully back from the rail in the rear of the stateroom, by the restraining hand of their mother.

"Funny, all the pretty girls get off when the boat leaves," remarked the brother, disconsolately eyeing a group of sad ones pacing up the deck towards them.

"There! There!!!" returned Miss Adair soothingly, as she stood gazing back at the disappearing landmarks of New York. "Perhaps some will appear on deck later. It is two long weeks to Naples."

"They *will* be long, too," said Arnold with the uncomplimentary freedom of a bored brother. "How long do you expect to keep me motoring you about Sicily?"

"Oh, about a month if you are good," replied Alice sweetly. "Are you so eager to get to Pau,

then? Wouldn't you rather motor across Sicily with us than be working over your greasy old aeroplane engines?"

"A month!" repeated Arnold, disregarding his sister's silly comment about engines. "That will get us to the Dolomites around the first of August. There I will positively leave the car with you and skip over to Echstein to see Bunny for a day or two; then I must get to Pau. I'm crazy to see Philippe again!"

And so did Arnold lay his plans. In the same idle way, thousands and millions of other individuals laid plans, careless or careful, in that eventful summer of 1914. Then suddenly came that dreadful whirlwind, war, which ruthlessly swept futile plans and bewildered humanity together before it.

But of all the strange experiences that fell to the lot of a human being, perhaps those adventures in which our young Arnold Adair had a part — those describing the development of the aeroplane of war — are the quickest to awaken the admiration and wonder of a war-weary world. Some of his extraordinary adventures must be set down in his own words, as many of them took place far above human eyes and were known only to himself alone. He tells about the beginning of war and the situation in which

it caught him and his defenseless family in the pages that follow.

THE NARRATIVE OF ARNOLD ADAIR

The beautiful valleys and mountains of the Dolomite country are certainly far enough removed from the rumors of war. As we crossed the Italian border into Austria on July 29, and spun along the smooth forest roads from Belluno to Cortina in my smart motor car, the whole family, ostrich-like stuck its head out to sniff the fragrant pines and said contentedly to itself, "There is no smell of powder here!"

Petrol was forty cents a gallon in Italy an hour or two ago. Now in Austria it is almost a dollar. This absurd doubling in price in ten miles' running gave me some reflection. Next morning, before breakfast, Alice and I walked down to look at the car.

"Wonder if Austria is going to war with Servia," I said to the petrol baron as he was filling the tank.

"Nein," answered the man contemptuously, "we might give them a whipping, but that won't be war. There will be no more wars in the world, I think."

"Arnold you know they fired bullets at the *Martha Washington* as we were leaving Corfu," my sister

remarked on our way back to the Bellevue, a few minutes later.

"Yes, but those were Albanians. The captain said they had fired on Austrian ships before."

"Well, I believe there is going to be trouble," replied Alice knowingly. "I am glad we are Americans."

"You don't mean to say so," I volunteered sarcastically. "Who'd a thunk it, now?"

Alice ignored me as usual and sang happily to herself as we walked along.

The crisp sunlight flickered through the leaves of the overhanging trees on to our breakfast table. The perfume of dewy hay in the field and red roses on the hedge drifted over us. Fragrant strawberries, Vienna rolls and coffee, Cortina honey, lay temptingly spread about a bowl of wild flowers in the center of the white tablecloth. The most delicious breakfast in the world is served in this gentle garden spot — Cortina.

Peasant girls, hatless, in laced-up bodice and multi-colored sash, passed down the road to the market place, driving strange lumbering carts on wooden disk wheels drawn by an ox and a horse in tandem, tinkling their bells merrily in the perfumed air. Then shouts of children playing on the slope opposite

came to us across the stillness. Twenty-five miles away, railroads clattered and men argued over their morning journals. In this simple community, shrines and crosses halt the devout at every cross-road for a moment's prayer; smiling *fraüleins* and their clumsy sweethearts work side by side in the fields.

My mother was breakfasting in her room. The two youngsters were splashing each other in the icy brook back of the hotel. They had breakfasted and then exhausted the sights of the town long before the rest of us were up.

A huge yellow touring car came bounding up the road. We idly watched it come to a stop in front of us. Two officers in gray Austrian uniform got out. While we sipped our coffee, they tacked up a glaring proclamation on the large tree opposite, then without a word they jumped into their car and shot rapidly away.

Alice and I walked over to take a look at the poster. It was signed by Emperor Franz Joseph. After the usual paragraph of polite preamble, it directed all his male subjects of the cantonment between the ages of nineteen and forty years to assemble on Monday morning in the market place of Cortina. Also all horses, cattle, sheep, and hogs were

commandeered. They must likewise be brought in Monday morning. All such animals taken by the Government would be paid for by an order from the Treasury. The same proclamation was being tacked up in every canton in Austria that Saturday morning. "No loyal subject must seek to disobey! It is ordered!"

Monday at nine o'clock, no further news having penetrated to this sequestered spot in the mountains, we walked down to the village square to see the gathering of the clan. Officers sat on boxes and inspected each animal as it was brought forward. Some were taken away by soldiers to the concentration camps, and some few rejected ones were led back home by the peasants. Many tears were shed as the script was received and the owner parted forever with his beloved beast.

Still more grief was exhibited across the square, where the young reservists were being told off and ticketed for uniforms. They were placed in motor busses which moved off toward Toblach when filled, the men leaning out of the windows, waving their hats and cheering, while their women folk sobbed into their aprons.

To one pretty young girl my sister spoke. "He will come back in a day or two, Fraülein. You

mustn't cry." She dropped her apron and stamped her foot. "Oh, they have no right to make us fight," she sobbed.

Walking soberly back through the village, we saw an excited group about a new arrival. He had a morning paper which is printed across the border in Italy. It said that Germany had declared war on Russia and was moving on France!

On France! My mother is French. And Philippe Pieron! Many of my cousins and friends would be fighting for France. What if this thing should be serious! Old General Pieron's prophecy suddenly smote me!

I took out my wallet and counted my Austrian money. It suddenly occurred to me I was the banker of the family, and I had quite an expensive party to finance. Hurrying to the one small bank of Cortina, I produced my Brown Shipley letter of credit. "Will you please give me a thousand kronen?" I said in my best German, extending my identification signature. "Not a pfennig," was the reply, and the cashier banged down his window.

After a family conference we pooled enough money to settle our small bills, and in another hour were speeding back into the world in the motor. I knew a hotel keeper in Innsbruck and felt certain I should

get money and reliable news from him. We sped by scores of vehicles loaded with reservists bound for the railroad. All were singing and cheering. Occasional sentries stopped us at crossroads, and asked for our "papers."

"Americans," I said, pointing to my passengers of women and children. We were obviously a family of innocents, and as we were undoubtedly going in the right direction, we were in no case detained for long.

The forty miles to Innsbruck was covered in a trifle over an hour. I drove directly to the hotel and sought out my old friend, Muller, the proprietor. He hurried to me, wringing his hands in despair. "But it is impossible, mein Herr," he shouted vehemently. "There will be three hundred thousand troops in Innsbruck before nighttime, and every hotel is conscripted for the officers. I cannot take you in. I can give you no money, but I will give you food, and you shall take it in your motor."

The city had been in a ferment of excitement for several days. Muller informed me that German troops were being sent across Austria into Servia, because of the distrust of the loyalty of the Austrian soldiers along the Danube. These, therefore, were being transferred to the east of Germany to meet the

Russians, whom they genuinely hated. Consequently Innsbruck was a mobilizing center and exchange department for both forces. All railroads were used for the military. No more trains would carry civilian passengers.

When I got back to the curb, I found a police officer questioning my mother and sister. He was a kindly man and was trying his best to aid us. We were certainly not wanted here, and he recommended we go to Switzerland. "But you will not be permitted to go in your automobile," he added, "and there will be no trains for you until mobilization is completed."

A little matter of three weeks or so suspended in a vacuum somewhere — anywhere so long as it was out of Innsbruck — would undoubtedly put us all right again, was his earnest conclusion. But my motor car, it was his unpleasant duty to retain. Such were his orders. He would give me a receipt for it!

Certainly he would go with me to the American Consul, but it would not turn out to be different.

We had our small luggage given us. Our trunks were safe in Paris by then. An evening train destined for Munich found us aboard with our tickets and an official receipt for one American automobile. Groups of excited fellow countrymen surrounded us

and insisted we should be turned back at the German frontier. No strangers would be admitted into Germany from Austria, for they themselves had been vainly pleading and bribing for two days.

But we went. Undoubtedly the handicap of protecting two women and two children across Europe in wartime was too much for regulations as administered by merely human officials. At the border we were detained and examined closely but finally permitted to proceed on to Munich. An entire compartment was vacated for us by the soldiers, and the two boys stretched out and slept. The rest of us sat through the night and discussed plans.

As we left the train in the morning and proceeded to our hotel in Munich, we learned England had that day declared war!

For the three weeks following we formed part of the five thousand stranded tourists who daily met in the hastily enlarged offices of the American Consul. The British Consul had disappeared at the beginning of the trouble to nobody knew where, and his compatriots were clamoring for money and news at our offices. A dozen of us volunteered our services to help out the staff at the Consulate. All Americans were enrolled and were given small flags of the Stars and Stripes to wear in their buttonholes; all were

cautioned not to speak English on the streets and to stay indoors, especially at night.

A fund of twenty thousand marks was raised by the American Colony and presented to the Red Cross Society of Munich. This little occurrence was loudly praised by the morning papers, and more than one pedestrian stopped me the next morning on my way to the Consulate, touched the flag in my buttonhole, and told me that "America was all right."

Every afternoon I took my small brothers down to the station to see the reservists come in. I marveled at the machinelike regularity of the vast mobilization. Every train carried one thousand men. Every train moved at the speed of sixteen miles per hour. Through the day and through the night these trains came in and departed again at exactly twenty-minute intervals. In that twenty minutes the thousand incomers left the station and were marched up Behrstrasse in their country clothes, each carrying a little bundle or knapsack of clothing; and simultaneously the outgoers marched down an adjoining thoroughfare to the station in their new uniforms, a smart little nosegay of flowers stuck in the muzzle of each shining musket, and these refilled the empty coaches. In the meantime the engines had been changed, sweepers had cleaned up the interiors, win-

dow polishers worked outside while a box of food for each soldier was placed in the seats. Every man had one certain duty, and every duty was performed with conscientious care.

The train pulled out, and the next one came in. Day and night the sidewalks were crowded by cheering men and women as the new troops marched up to the barracks at the twenty-minute intervals. Passing through the arched gateway in double file, each was given his uniform, gun, boots, helmet, and accoutrements. Twenty minutes later they emerged newly clothed and, with an extra rigidity in their appearance they marched singing down the street six blocks away, where they turned into the spacious garden of the Glass Palace. Here they were lined up in accordance with their height, the roll was called, they "counted fours," and marched through the opposite gate to the railroad station, giving place to the following regiment.

As one German officer said to me, "If any general three hundred miles away needs a hundred thousand troops, he knows exactly when they will arrive. A thousand to a train, leaving twenty minutes apart, traveling sixteen miles an hour with every engineer, station master, signal officer, the commissary department, and the receiving officers laying their plans to

meet this methodical transportation, the last man will be in his place at a given moment, known months in advance to an absolute certainty."

Strange stories were afloat among our hysterical countrywomen. They appeared at the Consulate and exhibited diamond-encrusted purses with only a few copper coins inside. Most of them had large letters of credit, but the banks refused to honor them. Many banks closed entirely. The Consulate arranged for a pittance per day to relieve absolute necessity, but all needless extravagances were sternly prohibited. Cablegrams by the score, addressed to America, were left at the office, paid for — and returned. Ships were sailing from Naples and Genoa, and tickets were bought at ten times their value, but the road to Italy was not open. Holland was another haven of American boats, but that too, was out of the question. American trunks and small luggage was abandoned all over Europe. Not even checks or receipts could be obtained for them. As for Switzerland — the rumor went about that she was starving to death, and all strangers were turned back at her borders.

Nevertheless I got our identification papers viséed by the Swiss Consul and at the first opportunity our small party embarked on the sixteen-mile-an-hour

train for Lake Constance and Lindau. Here we spent our last night in Germany with the mountains of the Suisse reflected in the waters of the lake separating us.

I spent the evening in the Concert Garden with a Swiss captain, who was returning to Berne to rejoin his regiment. The Swiss too, were mobilizing at their north and south frontiers. He told me the Germans would be in Paris within a week. He was engaged in business in Berlin but had been summoned home. His sympathies were entirely with the Germans, for he came from the north Swiss country where the German language is spoken and German customs are popular. I had first noticed him in our compartment shortly after leaving Munich. He had jumped between us and pulled back the two boys from the window and closed it. "Mein Herr, they will be shot, so," said he. I followed him to the rear of our coach. On each side of the rear platform stood, with drawn revolver, a German soldier, leaning out, intently watching the windows of the car. At the end of the bridge the train stopped, and the two guards alighted from each platform.

"A Russian spy dropped a bomb from the windows of a train as it was passing over a bridge a few days ago," said my new friend. "Since then two guards

are put on each carriage while crossing every railroad bridge in the Empire."

We spent Sunday at Zweisimmen, back in the mountains of the north central part of Switzerland, and I noticed with surprise the extent to which the Swiss people were divided over the war. Several thousand soldiers were being gathered here. Early in the forenoon they all assembled on the level parade ground for the Sunday worship. Great disorder appeared in the shifting masses of men. Upon inquiry I found they were assembling themselves into two bodies — those who spoke German, and those who wished to attend the French services. They were about evenly divided in bulk. Then again both groups divided, and I found about half of each were Catholics and half Protestants.

Around these four compact, circular masses of uncovered heads I walked, incense rising from this one, hymns in French from that, exhortation in German delivered by the Protestant chaplain on the hillside, and solemn intonations in Latin from the French Catholics opposite.

But Switzerland, though divided into German, Italian, and French in her customs, speech, and sympathy, stood united at her borders to preserve her neutrality from violation.

We found friends in Berne, Lucerne, and Vevey. Streams of Americans had poured through Geneva to Paris and England. Ships were crowded to the last berth in the steerage. Many persons were remaining, however, some because they were not ready to go home, others because they had not enough money to go. The Consuls were lending one hundred and fifty dollars to any person who could establish the fact of his American citizenship. The only security required was a promissory note, payable on demand.

On the first of September, however, came a peremptory direction from Mr. Bryan, then Secretary of State, that all Americans should be sent from Switzerland through Paris to Havre where passage could be obtained to New York. Accordingly, special trains were prepared, committees were appointed to take charge of them, and the exodus began.

Two West Pointers had been sent on from the Paris Embassy by automobile to take charge of the departure of these American trains at Geneva. They had to guarantee that none but American citizens had places in these trains, that none were overcrowded, that food be provided along the way, and that all luggage would be forwarded.

To my great joy I was invited to accompany the officers back to Paris by automobile, and after seeing

that my mother and sister were willing, I left my family with a party of friends and arranged to meet them at the Hotel Choiseul in Paris the following night. Major H. and Lieutenant L. stood with me and watched the last train depart, then we drove to the Royale for luncheon.

These officers informed me that in their automobile journey from Paris to Geneva, they had been arrested and inspected eighty-two times by French sentries. As I was utterly incredulous, they challenged me to wager them a dinner in Paris on the number of stops we would make in our journey there. I accepted, and purchased a notebook and pencil with which to keep the score.

Our chauffeur was a Paris cabman, extraordinarily gifted and fluent in patois profanity. Before we had reached the French border, we heard him shouting rich resonant oaths into his windshield. My companions were convulsed with laughter. We were bounding along at a tremendous speed over the perfect roads; pointing back, the Major indicated a melancholy priest on a bicycle, his black garments flopping wildly around him in the wind. "Henri considers that the worst kind of luck—to meet a priest on a bicycle," the Major explained. "He always has a puncture after passing one." Sure

enough, our very first stop was a puncture! While Henri was replacing the tire muttering comical comments on the itinerant clergy, we lit cigarettes, and producing my notebook I noted stop number one. With so great a margin, I could afford to be generous.

The next afternoon, however, as we entered the fortifications about Paris, I tallied up my score and found we had been stopped by sentries just eighty-four times in our run of some three hundred and sixty miles! At every crossroad, in front of every railroad crossing, chains were strung across our road, and armed guards removed them only after a searching scrutiny of our passports. In front of every village and before every military encampment, a soldier mounted our running board and escorted us to the Mayor's office or to the Officer of the Day, where a *laissez passer* was issued us after a full inspection of our papers. As these papers were signed by W. J. Bryan under the seal of the American State Department and permitted us to go anywhere in Europe to "relieve American citizens in distress," the formalities were quickly over, and we were sent on our way to Paris with cheers and a waving of caps.

Spending the night in Chalons, we received the

information that the German Army was at the gates of Paris and that the French Government had that day evacuated and removed to Bordeaux! Diverting our course to the south next morning, we made for Orleans to evade any far-ranging Germans. All the way up to Paris from there the road was literally covered with southbound automobiles! Every Parisian family possessing a conveyance had apparently flung in furniture, bedding, and babies, and taken the road to the south. Our solitary course against this outpouring stream was slow indeed.

At five o'clock that afternoon we arrived in Paris. I alighted on the Avenue de l'Opera opposite the office of the American Consul, and I was saying good-by to my friends when a sudden panic appeared among the passers-by. In a trice the sidewalks were deserted. Henri leaped from his seat, gave one look into the heavens, and disappeared within a doorway. We gazed up into the air and fascinated, watched a German aeroplane flying directly up the Avenue over our heads. Now we could distinguish rifle shots and machine-gun fire. As he disappeared over the Opera House, we heard the explosion of two bombs a short two blocks beyond. Paris was being bombarded by aeroplane!

I still stood dreaming after my friends had left

me, and the streets were filling with gesticulating, weeping women and children.

After our friends had left us that night, and I was alone with my mother and Alice, I told them of my determination. I should see them safely off for New York on *La France* next Saturday, but I should not go with them. I had cabled my father in New York that I would offer my services. If he would permit it, I would say good-by to Harvard and become — an Air Scout for France.

CHAPTER IX

AEROPLANE FOES

ON the morning of Friday, the fourth of September, 1914, when German troops were encamped but a scant thirty miles northeast of Paris, a smart racing roadster dashed across the southern boundary of the city and stood panting before the threatening bayonets of the three sentinels who were guarding the old highway from Versailles. The driver drew from his pocket an official pass, and extending it at arm's length towards the corporal in charge of the squad, said pleasantly, "Hurry, please!"

The latter, advancing briskly, came to a soldierly salute, cast a quick glance at the face of the card, and turning to his men, shouted, "Remove the chain!"

The lieutenant at the wheel returned the salute, threw in his clutch, and with a roar the light car shot ahead and had bounded out of sight in the direction of the city before the heavy chain was restored to its position.

Twenty minutes later the racing machine came to a

sudden stop in front of the Aviation Offices of Paris, and the lieutenant sprang from his seat and ran lightly up the old stone steps to the portal. On the top step the pacing sentinel halted, came to "present arms," and smiled above his chin strap in response to the cheery "Bon jour, Leon!" of the officer.

Within the heavy door sat enthroned behind a massive desk, an old rheumatic relic of earlier wars of France, the custodian of a thousand cares and secrets, and the guardian of the privacy of the hundreds of officers within.

"Good morning, Sergeant. Any messages for me this morning?"

"Yes, M. Philippe," returned the old doorman, gazing kindly at the young officer through his sagging spectacles. "Your desk finds itself covered with them since two days. And a gentleman has been here twenty times to see M'sieu. He will be in again at nine o'clock. Here is his card and a message."

Philippe took the proffered card from the door-keeper's hand and with unconcealed delight read, "Mr. Arnold Adair." Underneath was written, "Must see you,—Arnold."

"Good!" cried Philippe, smiling back into the old Sergeant's inquiring look. "Send him in as soon as he comes."

The old man sank back in his padded armchair and made a note of it, while the young officer passed through the corridors and entered his own office at the end of the hall. Inside his door he heard voices. Two officers of the French Air Service were impatiently awaiting his arrival, meanwhile consuming frequent cigarettes.

Both got to their feet as Philippe entered; both stepped forward to meet him, and cordially gripped his extended hands as he greeted them.

Colonel Jorn eyed the young man gravely as he motioned to him to take his chair. "Look through your dispatches first, Lieutenant Pieron," he directed. "There may be something imperative there. Captain Demain and I desire to have a short talk with you as soon as possible. I'm glad you came in early."

"Nothing important here, sir, unless it came in this morning," Philippe returned, bowing. "But if you will permit me I will look through the pile."

He ran over the orders, messages, and telegrams covering his blotter, read several through quickly, and laid them one side. The two older men sat silently watching him, mingled pride and concern marking the stern features of Colonel Jorn, while a whimsical smile lighted up the frank face of Phi-

lippe's old friend and flying companion, Henri Demain.

"Thank you, sir. I am ready," announced Lieutenant Pieron, turning and looking steadily into the Colonel's eyes; "I am sorry to have kept you waiting."

"Lieutenant Pieron," began the Colonel nervously, "I have sent for you to come in to discuss the defense of Paris against these daily aeroplane attacks. Captain Demain here says you are one of our expert aviators. You probably know that a German machine has flown over the city the past three afternoons, dropping bombs and terrifying the citizens. Now what can you aviators do to stop this outrage?"

"Have the bombs done any serious damage, sir?"

"No. A few broken windows and one or two buildings slightly disfigured is the extent of the damage. The bombs are small, and fortunately no persons have yet been struck. But these bombardments may become serious."

"And your gun-fire — it doesn't swerve the German?" inquired Philippe, leaning forward interestedly.

"He ignores it. Millions of bullets were fired at him yesterday from all parts of the city, but he

ignores them. One must admire his coolness and nerve."

"Yes, I know von Hiddessen," Philippe returned. "He has nerve. But I doubt if he knows he is being shot at. His engine makes so much noise close to him that he probably cannot hear the sounds of guns on the ground. How far up was he?"

"Five or six thousand feet yesterday," Captain Demain interposed. "I stood on the Pont Neuf and saw the whole exhibition. I could hear the big guns from the outside fortifications long before he came in sight. Then, as he appeared, I could hear the roar of muskets and machine guns. Even pistols were fired at him. It was like a rabbit chase. A million persons were undoubtedly shooting at that one man in the sky. The world has never seen such a thing before. The roar of our gun-fire drowned out the sound of his engine to me."

Philippe gazed at Demain, fascinated by the vivid picture the Captain drew. His dream of a lifetime was coming true. Aeroplanes had raided a great city! *And shots from below had not stopped them.*

"I would give a leg to have seen it," said Philippe regretfully.

"Well, you will see it to-day, no doubt," put in Colonel Jorn, with some bitterness. "I sent for you

to come and talk this over with us, for the rascal promises to be back to-day. Read that!" and he handed Philippe a scrawl written in lead pencil on a page of a notebook.

Lieutenant Pieron read in amazement this brief message written in German script.

" People of Paris! Surrender.
The Germans are at your gates.
I return tomorrow at five.

LT. VON HIDDENSEN.
Air Scout."

"He dropped that in a bag of sand just inside the Tuileries," observed Colonel Jorn indignantly. "You see, he scorns our defenses!"

A sardonic vein of humor, rather unsuspected in the stolid young von Hiddessen! And a direct challenge to the boasted military defenses of the oldest and strongest fortified city in the whole world! His aeroplane had soared over these fortifications as free as a lark in the sky. Probably out of the millions and millions of bullets that had been hurled desperately at the raider, not one had even penetrated a wing. Philippe would have given much to know if the German machine had been hit. But no person in Paris could tell that. Never until the past few days had mankind tried this experiment. Here was

the aeroplane arrived in wartime — a brand new instrument of war, introducing with the art of war-flying, a brand new science to be learned. And the German von Hiddessen had been the first person in the world to test this new science against the hostility of the combined population of a city like Paris!

“Well,” said Colonel Jorn, pulling at his gray mustache impatiently, “what are we going to do about it? I am responsible for the protection of this city, but it’s useless to waste bullets on him. They all come down somewhere in our streets, you know! And *our guns can’t get him*. My opinion is only you aviators can stop this fellow with his bombs and his insults. Now, *can you do it?*”

“What type of machine did von Hiddessen fly?” inquired Philippe, turning to Demain.

“Taube.”

“Seventy or eighty miles per hour?”

“Um — well, not more than that at any rate.”

“Does he come in over St. Denis from the north?”

“No. Rather from direction of the Marne, I should say. However, we haven’t accurate information about this.”

“Do I understand, sir,” said Philippe, turning to the senior officer, “that I am ordered to this patrol

and am to be withdrawn from my school work? The reason I ask is that my machine must be equipped immediately with armament if I am to patrol Paris."

"*Sacrebleu!* Yes!" cried Colonel Jorn. "Demain has sent for you. Drop everything — equip your machine in any way you wish, but stop this insolent damned German. But I first desire to know what you propose to do."

"The first thing, of course, is to have a faster machine," replied Pieron, glancing at Captain Demain. "Otherwise we can't catch him."

"Second, we must be up in the air waiting for him, otherwise he can come and go before we climb up to his level. How many pilots can you spare this afternoon, Captain?"

"Not one," answered Captain Demain decidedly. "Every machine is needed at the front, and a hundred times more. I will go up in my fast Morane. It is here at Vincennes. What machine can you get here on short notice?"

Lieutenant Pieron considered a moment while Colonel Jorn paused in his pacing and stared at him anxiously. Finally he replied thoughtfully:

"My own Farman is at Buc. I think that is best. What arms do you order, Captain?"

"Yes!" broke in Colonel Jorn abruptly, "that's

the question! What are you going to do if you do catch him — swear at him?”

Captain Demain smiled and drew from his pocket his short automatic pistol.

“If we get within target distance of the Fritz, we can break his propeller at least. What do you say, Phil?”

“I believe I can mount a machine gun in my two-seater,” Philippe replied quietly. “In fact, I have already done so. But this of course means carrying another man along as gunner.”

Colonel Jorn’s anxious countenance relaxed. “Superb!” he cried, extending his palm dramatically towards the citizens of Paris. “Your plan is admirable, Lieutenant. And who is to be your gunner?”

“M. Arnold Adair!” announced an orderly crisply, throwing open the office door, through which suddenly popped the energetic figure of the aviator, which as suddenly came to a stop inside the room.

Colonel Jorn stood mute and petrified at this theatrical answer to his question. Captain Demain burst into a shout of laughter. Philippe had sprung from his chair and now stood with an arm around the stalwart shoulders of the newcomer, smiling into his

amazed face, as Arnold looked in turn from one officer to another.

"Glad to see you, young 'un," said Philippe. "Let me present you to Colonel Jorn. Colonel, this is my old friend — a New Yorker — Arnold Adair!"

"Captain Demain! — M. Adair!"

"Am I in the way, Pieron? I just came to enlist in your Flying Corps," said Arnold, affectionately squeezing his friend's hand.

"You mean that?" asked Philippe quickly.

"Yes, if you will have me," returned the American simply.

"If you approve, sir," said Lieutenant Pieron, turning instantly and bowing to the astonished Colonel, "my gunner this afternoon will be — M. Arnold Adair. We have flown together before, sir. May I request your aid in securing quick action on his enlistment, Colonel Jorn?"

"You may, sir, indeed," responded the Colonel, welcoming the grateful gesture from Arnold with a hearty handshake. "Bring him to my office in half an hour, Pieron, and all will be ready. Now remember, I am relying solely upon you," Colonel Jorn added with emphasis. "I will leave you three air-men here to talk over your plans," went on the senior

officer, moving to the door in great good humor. "Call on me if you need anything we can give you." And bowing to each of the three in turn he passed through the door as Arnold opened it. "*Get that von Hiddessen!*" he warned them threateningly as he disappeared down the hall.

"Henri!" said Philippe, resuming his chair as Arnold closed the door, "here is the situation in a nutshell! Von Hiddessen flies alone. He's got a pistol the size of yours there, and probably a rifle or an old shotgun tied into his seat somewhere and ten or fifteen bombs the size of your fist in a box at his feet. But he can't aim his gun and steer at the same time, and no more can you. Now you in your single-seater Morane can run circles around him once you get to his level. But you've got no better weapons than he has. If he tries to fight instead of running away, he's just as apt to get you, as you are to get him. And that won't do, you know. You can't take a chance of being brought down. Think of the scandal!" And Pieron grinned broadly at his superior officer.

Arnold laughed as Captain Demain winked comically, and offered him a cigarette.

"My old bus," went on Pieron, serious again, "with its extra load of gun and gunner, can never

overtake the Taube, if he wants to get away. So my superior armament is no use unless I can get within gunshot of him. He'll get away almost surely unless we get more planes here."

"That doesn't matter," interrupted Demain, tilting his chair back to the wall. "Let him get away. If we keep him from coming over the city, that's all we have to do. If he runs — good. If he doesn't, you and I take a pot at him."

Philippe shook his head but did not reply. Captain Demain went on.

"Don't try to do the impossible, Phil. These raids don't amount to much, anyway. The old man is all cut up about it, of course, since he's supposed to keep them away; but actually now, if we scare von Hiddessen off, we've satisfied the Colonel and cheered up the public. Our planes are needed for watching the Germans' movement of troops behind their lines. As a military matter, Paris doesn't count. We simply cannot spare a dozen machines here just now."

Arnold gazed from one to the other in admiration and wonder. What a lucky chance that he had suddenly dropped into the midst of such a discussion as this! These two young airmen were actually given charge of defending the famous city of Paris against

aircraft attack! Never in the history of the world had men ever discussed such a thing. It was new! Here for the first time, foe faced foe in aeroplanes! How *can* one conquer the other? No encyclopedias and no histories can be turned to in such a quandary. Not even military experts or generals are of any use in this dilemma. Had not Colonel Jorn just said he could do nothing to prevent the German aeroplanes coming? Nothing — save rely upon Philippe and Captain Demain for an aeroplane defense! Philippe Pieron, Arnold very confidently surmised, had given more thought to this especial subject than any other aviator in France.

“Yes, you are right, Henri,” Philippe was admitting reluctantly. “We must simply trust to luck for awhile. But I must telephone the school and have my machine tuned up. What time shall we get started?”

“Four o’clock,” replied Captain Demain, getting to his feet. “I’ll see you again after you have telephoned. We must arrange to have the earliest possible report of von Hiddessen’s appearance signaled us from Eiffel Tower by flags. I’ll see to that now.” And he shook hands with Arnold good-naturedly and left the room.

“What corking fellows these officers are,” thought

Arnold, as he was seated beside Philippe in his racing car a few hours later. Neither had taken time for lunch, and Arnold had been constantly at Philippe's elbow since his early appearance that morning. He had signed the papers, been solemnly sworn into the French Service, and turned over to Lieutenant Pieron in one brief transaction. Not until they were clear of the offices and upon the open road to Buc did Philippe explain to his friend the full duty that lay before them.

"Arnold, old Indian, we must get that German this afternoon," Philippe concluded. "Have you ever shot a gun from a machine?"

"No," replied Arnold briefly.

"Well, nobody else has either," Philippe observed drily, stepping on his accelerator and cut-out simultaneously, as they struck the bridge. Up the opposite slope they flew like an arrow, Arnold vainly trying to realize that he — he, Arnold Adair of New York — within two hours was to go aloft over the upturned faces of the entire population of Paris and try to shoot down another pilot as he balanced his unsteady aeroplane in the dizzy sky. Could he do it? If Philippe expected him to — yes!

The mechanics were working feverishly over the Farman pusher as the automobile rounded the cor-

ner of the hangar. A platform had been built up around the nose of the machine, and a heavy tripod gun mount was already screwed securely into the floor and braces of the cockpit. The gun itself lay wrapped in flannel upon the platform, and beside it an open box of wood disclosed an apparently endless belt of cartridges, with one end protruding.

Philippe approached and took up the cartridges. Unwrapping the gun, he indicated to Arnold the firing mechanism, the apertures for feeding and ejecting the shells, the water jacket, lanyard, and gun sights.

"They feed themselves as long as you pull the string," explained Philippe. "Don't pay any attention to them. Keep your sights on the target and let her hum. We'll take a few shots from the machine as soon as they finish here."

In ten minutes both the young men reappeared clad in Philippe's flying garments. The mechanics had removed boards and platform and now stood circled about the machine, excitedly mopping their blackened faces with still more blackened handkerchiefs.

Arnold glanced at his watch. It was nearly three o'clock!

"Now, old boy," said Philippe, as he swung one

leg over the cockpit, "I'll dive you down dead at a small lake ahead here, and you get accustomed to your gun. Watch and see where the bullets strike. If the gun jams, take your left hand and work this lever here until she takes hold again. Ready?"

Arnold nodded solemnly.

"Oh, come now! Buck up!" Philippe taunted, smiling. "Get easy in your mind, Chingachgook, and forget it's anything more than a lark. I know you will keep your head, old son, but I'm worried about your pious looks. Somebody may photograph us."

"Silly chatter you're spilling, Phil. But I get you," returned Arnold blandly. "Let go her head."

The windshield had been removed by the mechanics to give greater mobility to the gun. His seat too, had been torn out. Arnold made fast his safety belt to the rear leg of the tripod and kneeling on the floor of the fuselage he depressed the gun barrel and looked along the parallel sights. He had to stand erect in the wind to aim it. The first trial shots at the lake were perfect. On the second swoop, however the gun jammed after the first shot. Upon examination Arnold found that the force of the wind twisted the light cartridge belt before it entered the



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He Had to Stand Erect in the Wind to Aim It
Page 110

gun, and this twisting had caused the stoppage. He indicated this difficulty to the pilot behind him, and Philippe motioned to him to straighten it out and keep it steady with one hand, when firing.

Another dive at the smooth water target, and Philippe turned and began to climb. Arnold sat flat on the floor, adjusted the field glasses which he had hung suspended by a cord around his neck, and peered ahead at the city.

The lofty and rather ugly Eiffel Tower first struck their view — then the entire city lay spread before them. A few clouds hung at a high altitude above, but the sun was unobstructed, and no haze obscured the horizon. Arnold swept the sky with his glasses but could not pick up another plane of either friend or foe. Captain Demain was to go aloft from the Vincennes field to the east of Paris. Philippe was headed in that direction now.

Straight across the center of the old city the aeroplane roared. Cheering crowds could be seen in the middle of the streets beneath them. The bridges across the Seine were black with crowded vehicles and pedestrians, waiting excitedly for the show. Even the parks and quays seemed covered with white up-turned faces. From the near-by flagpole on the top of Eiffel Tower, no signal flags were yet strung.

Arnold looked at his watch. It was after four o'clock!

Over the Vincennes field they discovered the little monoplane squatting on the turf surrounded by a group of officers and mechanics. As they circled to the north above it, they saw the Morane leave its position and dart across the field. In a few short minutes the fast climbing "Parasol" was swinging around them at their own level, and the three aerial travelers waved their hands gaily to each other in passing.

On to St. Denis they flew, Demain in his faster machine circling far out to the east and north at a thousand feet and more above them. Back again across the center of the city from north to south, curving around their signal tower, still quiescent, swooping down within view of the enthusiastic populace, their tricolor *Cocards* evoked proud acclaims of joy from the hundreds of thousands of waiting spectators. France was vigilantly guarding the Paris sky at last!

Arnold, tense and watchful, let none of these details escape him. Alternately he watched through his powerful glasses the tip of the warning tower, the crowds below, the rapid movements of the twinkling Morane, the sweep of the horizon from east to north

through which must ultimately come the daring von Hiddessen. And so an hour passed.

Thus it was Arnold who finally caught the first thrilling view of the ascending white and red flags as they appeared dangling over the edge of the iron railing at the very top of the Paris Tower. Making certain of the signal, he turned and shouted at his companion, pointing with extended arm to the streaming signal flags. Far ahead of them, Captain Demain was streaking it away to the north. Had he seen the warning? He was going in the right direction at any rate. Arnold turned his glass beyond to the distant German lines. The noise of the engine made communication impossible save by gestures.

As he was peering ahead, he felt the machine swoop downwards and bank steeply around. Grasping the tripod with one hand, he steadied himself and turned about inquiringly to look at Philippe. The machine completed a half circle, pointed her nose slightly upwards, and climbed steadily and swiftly into the dazzling western sun. *They were going away from the enemy!*

Incredulous, Arnold gazed fixedly at his friend. Philippe shook his head and smiled exultantly back into Arnold's bewildered face. Completely mysti-

fied and somewhat doubting Pieron's sanity, the disappointed gunner sat down on the floor of his cockpit and puzzled his brain for a solution to this extraordinary maneuver. Surely Phil was not going to run away! Already they were over the Seine and leaving Paris behind them! Had Philippe discovered a whole squadron of German aeroplanes?

He whirled about again and seizing his glass, surveyed the eastern heavens behind him. Pieron nodded approvingly as his eyes met Arnold's.

There is an aeroplane! Is it Capt. Demain? No, it is different. It is lower down. It is a Taube with drooping wings! White puffs of exploding shells are following him!

Arnold dropped his glasses and pointed vigorously back. Philippe nodded his head indifferently. After a stupefied second glance at the nonchalant pilot, Arnold again glued his anxious eyes to his field glass.

There is Captain Demain now in his Morane! He is much higher than the Taube and considerably to the north of him. But he sees the German and is flying directly towards the raider. A lurch of the aeroplane nearly threw Arnold into the gun. Ah! they were coming about at last!

With one hand supporting his glasses and one

clutching the joy-stick, Philippe too, was studying the enemy's position. Banking the machine mechanically as he followed the Taube through his glass, Philippe estimated his own height above the unsuspecting von Hiddessen and his path down the sun's rays to the point of the enemy's operations. The German was swinging back and forth in long circles over the very heart of the city. Demain was circling about him now and the puffs of exploding shell smoke had ceased. Philippe could keep the sun at his own back and full into the eyes of the enemy all the way in until they met. Thus von Hiddessen would be unaware of his presence until it was too late to dodge. The sun would be squarely in the German's eyes. Opening the throttle to its limit, the engine redoubled its roar and the propeller at the rear pitched an increasingly higher note in its humming.

Arnold knelt before his gun. "Wait until the last moment," Philippe had warned him impressively before starting, "Don't let yourself get hurried. The whole day's work depends upon your coolness in waiting for the exact instant for firing." Arnold wondered if he was cool. At any rate he would keep his head about firing and would not pull too soon. With his left hand he supported the belt of cartridges. With his right he leveled his gun and kept it follow-

ing the movements of the swooping plane ahead.

Unconscious of the rapt crowds below, who cheered them wildly as the biplane swept over their heads, Arnold fixed his gaze across the narrowing distance and repeated over and over in his mind, "Don't pull too soon. Keep cool now, old boy. Mind you don't let her jam."

The Morane and the Taube were circling one about the other like bicycles speeding around the bowl. At intervals both pilots thrust out a hand into the rushing wind, and emptied the contents of an automatic pistol hastily towards the other's direction. Flatten-
ing out while they reloaded their weapons, they returned to the combat with increasing irritation and disdain. This target shooting required practice.
Dame!

The Farman descended like a meteor on the unconscious Taube just as the German pilot was intent upon the approaching Morane. Philippe pointed his aeroplane at the enemy's tail, cut off the spark and simultaneously yelled with all his might, "Fire, Arnold!"

His voice was lost in the tac — tac — tac of the machine gun. Standing beautifully erect in the cockpit, the gun's muzzle lowered over the edge, Arnold coolly gripped the trigger and held it firmly back

as he peered forward along the sights. His stream of bullets pierced a row of holes through the tail and traveled up the entire length of the defenseless Taube. It was all over in an instant. The gun bus passed over the top of the German, and a hundred feet beyond it went before the gun ceased firing, and Philippe began to turn. The startled von Hiddessen glared at them with popping eyes as they spun about, and dropping his unloaded pistol, he swerved to the north and scurried away at top speed towards home.

Demain pursued him eagerly — overtook him once before he was lost to view in the distance, but half an hour later made his landing alongside the waiting Farman and reported that the terrified German had made good his escape.

“Philippe, my old one, you are a wonder,” said the delighted Captain Demain. “And you, M’sieu,” he went on, seizing Arnold by both hands, “for a cool hand I never saw your equal. Permit me to compliment you!”

“Henri!” interrupted the tranquil Pieron, looking thoughtfully away towards the fearful northeast, “we have learned something to-day.

“If you keep between the sun and your enemy, he cannot see you, and you take him by surprise,” Philippe continued. “But more important still, you can

shoot his aeroplane full of holes, and he won't drop. You've got to hit the pilot or his propeller. Perhaps a shot in the fuel tank might set him afire. I don't know about that, but I will try the experiment to-night. And finally we've got to mount a rapid-fire gun in a fast tractor machine like yours."

"It can't be done," cried Captain Demain. "I can't carry a gunner in my Parasol. And if I could, it would not be possible to fire ahead. One shot would break the propellor!"

Philippe turned his thoughtful gaze towards the fragile little monoplane. Captain Demain and Arnold watched him with mutual and open admiration. With all his will power, Arnold was silently urging some miraculous response from the lips of his friend.

It came!

"I believe I can make a synchronizing device that permits the pilot himself to shoot between the blades of the propeller," the Old Dependable said slowly. "We must do it. You see von Hiddessen is this very minute sitting on a workbench in his hangar asking his fellows how to make his armament more deadly. We've got to do it!

"Climb in, Arnold, we'll get back to Buc!"

CHAPTER X

MY FIRST SUBMARINE

PHILIPPE insisted that I should come back here to Pau without him and put myself into the hands of the Government officials for the regular tests and schooling that is given all candidates for the flying service. He said it would be wiser for me to make my own way than to accept any advancement based upon his influence — and I at once saw he was right again, as usual.

Fortunately for me, I found myself well known here by reason of my participation in the aeroplane defense of Paris last month, with Philippe and Captain Demain. It is extraordinary how quickly aeroplane gossip travels about. The instructors tell me no end of flying news which comes to their ears from every airman who visits Pau. Naturally there is nothing else we are so eager to hear.

I am further advanced than most of the pupils here, but in spite of my year's experience in flying, I find there is much for me to learn. And thanks to my exploit over Paris, they take an especial interest

in me, and I am permitted to work overtime at the several experiments I am interested in most.

Beginning again with the raw recruits, I was first put through "grass-cutting" in an old schooling machine that could not lift itself off the ground. Up and down field I went, an instructor in the seat behind, where he covered the controls and bawled explanations into my ear. As soon as I could run a straight line with the erratic Voisin I was transferred to the east end of the field, where we were taught the hops. As nothing new or difficult was presented to me, my progress was rapid, and after one or two flights aloft with the instructor, I was permitted to go alone. Then I flew to my heart's content, usually circling over Biarritz to the south, where the morning sun lit up the snow-clad peaks of the glittering Pyrenees. I flew every type of aeroplane in the hangars.

Most of the day I spent in the shops, taking apart and putting together the engines, testing the strength of wires and control levers, assembling airplanes, experimenting with bomb-carriers, gun-mountings, and armor-plate.

We had our class work every forenoon and night, when experienced officers lectured on the nicer points of flying. Camera photography was also taught, and we learned to operate the new automatic camera

which had just come into France from Italy. This camera could catch the landscape from an airplane going at the swiftest speed. Adjusted at the proper elevation, it would automatically open and close its lens every sixty seconds or ten seconds, as desired, and would expose and roll up a total of eight hundred films.

The films we were taught to develop in the dark room, and we soon learned properly to adjust and conveniently to operate our cameras, and as the films were developed to label, mount, and enlarge them.

A number of English and Belgian pilots were learning to fly at Pau. Two other Americans besides myself were there. The bulk of the *élèves* were of course French — young men all of them, ranging in age from eighteen to twenty-five. A few older men who already had experience in flying were, like myself, preparing for the tests that would brevet us and attach us to some corps at the front.

The demand was so great and the supply of accomplished pilots so small that promotion was rapid in those early days of military flying. Corporals were brevetted to-day and in a week were made sergeants. A score of aviation schools throughout France were training as many fliers as could be accommodated.

It amazed me to see the variety of airplanes, the

frequency of smash-ups, and the army of mechanics employed at the Pau training-school. Accustomed to the timidity of our American Government in its experimenting with military aircraft, the expense and thought involved in the French preparations staggered me. Evidently the airplane was considered of military importance in Europe. Hazardous though it must of necessity be, the inexorable demand for aerial observation at the battlefront would be satisfied. Expensive as the daily accidents in training pilots proved, the task would go on. Our enemies had the supremacy of the air. It must be wrested from them regardless of costs.

Military discipline didn't like me a bit. It required diligent attention to conform my actions to military usage. Officers for whom I had the least affection exacted more respect than did those I liked best. Galling as this constant curbing of my inclination was, I appreciated the importance of discipline and swallowed my resentment.

One day towards the end of October, I was notified to report at headquarters with five other pilots. It was rumored about that we were to go to Étrétat immediately to join Captain Demain's corps.

I hastened in, and, after signing a score of papers, received my commission and identification badge, an

order for a complete aviation outfit, consisting of fur-lined coat, uniform, boots, flying helmet, goggles, gauntlets, and automatic pistol. I was assigned to the Seventeenth Corps, now occupying temporary quarters at Étrétat, on the coast north of Havre. Four days' leave was given all six of us, at the end of which time we were to report for service.

As I collected my few belongings from my sleeping quarters and said good-by to my friends, I was made conscious of my new position in the French army. The wings on my sleeve drew a salute from every one I met, and suddenly I found myself immensely pleased with the requirements of military discipline.

After two days' loafing among the hotels of Biarritz, idleness became unendurable, and I took the train for Paris, then to Rouen, where I spent the night, in order to wander for two hours about the venerable Cathedral of Jeanne d'Arc. Going on next morning to Havre, I found that the English expeditionary forces were still landing, French troops still mobilizing — encamped along the quays — and ocean steamers still advertising departures to New York. The Belgian Government now occupied Havre as its capital. Hotels were crowded, streets were filled with hurrying convoys of automobile lor-

ries and trampling troops of cavalry. Everything was noise, dust, and confusion.

As I was quietly lunching in the Café Louis, reading over the *communiqués* in the morning *Temps*, the chairs at my table were drawn back and several men in uniform seated themselves. Finishing the paragraph, I glanced at them and found three of my fellow pilots of the Étrétat corps smiling at me.

They had just arrived from Paris. We had a merry lunch together, and after a short swing about the town we engaged a car and were soon speeding north to our new quarters.

As we dodged around the dirt embankments which had been hastily thrown up to protect this coast road against the advance of the German army, we picked out several planes floating high in the sky over our heads. Several aviation camps, both French and English, were about us, our chauffeur told us.

Two miles out of Étrétat we found our command, and the balance of the afternoon we spent about the hangar, examining the heavy Caudron bomb-dropping machines and listening to the late gossip of the camp.

British seaplanes were using the fisherman's cove on the beach at Étrétat, and were daily patrolling the Channel on the watch for floating mines, submarines,

and enemy cruisers. These seaplanes were in every respect similar to our land machines, excepting that the wings were larger and pontoon floats were hung underneath instead of wheels, so that they could rest on the water.

Flying machines may be roughly divided into two classes, the lighter-than-air cruisers, of which the best example is the Zeppelin dirigible balloon, and the heavier-than-air vehicle, the airplane. This latter class depends upon motion to keep from falling to earth. Its taut fabric wings or planes must be large enough to support the weight of the machine by an adequate area of surface.

The airplane is divided into two classes, the land machine and the hydroplane, differing only in the one particular of wheels or pontoon.

Another general division of the airplane is recognized by the position of the propeller. If the propeller buzzes in front of the machine, the airplane is called a "tractor." If behind, it is known as a "pusher."

The pusher type permits an unobstructed view ahead and allows far greater latitude in mounting and operating a gun on the machine, but the tractor propeller gives more speed and quickness of maneuvering to the pilot. Hence the "tractor" is the su-

perior machine for war purposes, and both combatants bend their energies to overcome the inconveniences of observing and firing ahead through the swiftly revolving propeller.

Another classification into the monoplane and biplane types need only be mentioned. The greater stability and safety of the biplane makes it more popular than its rival, although in the matter of speed the monoplane will doubtless always hold first honors.

During the weeks that passed us at Étretat I was sent up in every type of machine and taught the whole list of pilot tricks. I experimented in all the various fields of airplane usefulness and suffered every variety of accident — save the fatal one.

One cold December morning, as I was about to take aloft my basket of small bombs to practice dropping at the target, an orderly came rushing up to my machine and stopped me.

“You are to report to quarters at once, sir,” he said. I climbed out of my seat and hurried to the commanding officer. He had just received a telephone call announcing that an enemy submarine had been discovered at the mouth of the Seine, in the harbor at Havre. Ten of our squadron were immediately to take the air, four others to follow as soon as their preparations could be made.

Captain Demain gave us rapid instructions as to our course and duties. We were cautioned to keep high enough above the water to permit us to glide away to solid earth in case the engine failed; if a submarine were sighted, however, we were to come down to so low a level that missing the target would be impossible — and take our chances in getting back to land.

“There is no ‘red tape’ in this business, boys,” was the Captain’s parting injunction. “You will be the best judges of your actions after you see the size of the affair there. Don’t let your petrol run too low. Good luck.”

I had a sturdy new Caudron biplane that carried fuel enough for six hours’ flight. Besides my Hotchkiss rapid-fire gun and two hundred and fifty rounds of ammunition, I carried two bombs weighing about thirty pounds each.

It was cold and windy. At four thousand feet above the harbor at Havre the icy wind paralyzed my cheeks and filled my goggles with tears whenever I stuck my head outside the protection of the windshield.

Fully a score of English and French airplanes were already circling over the whitecaps below. Ten miles south, across the harbor, the white buildings of Trou-

ville gleamed in the sun. The waters were dotted with patrol boats as far as the eye could see.

My heart was big in my throat as I realized that I was at last actually engaged in the war. I was about to seek out a boatload of human beings and deliberately do them all to death as though they were malignant wild animals. Then I thought of the German airplane over Paris, the fleeing, frightened women and children in the crowded streets, and the explosion of the deadly bombs dropped into this defenseless crowd by the pitiless visitor overhead. And below me now somewhere lurked another deadly intruder, bent upon merciless slaughter of whole shiploads of fellow human beings — such was war!

Blindly indifferent to risks, I headed out to the open sea, where the glinting airplanes seemed fewest. Looking down to accustom myself to the appearance of the waters at this height, I found it was useless to attempt to distinguish the dim outline of an underwater craft at such an altitude.

I accordingly cut off my engine and headed down, still aiming for the mouth of the harbor. Two thousand feet, fifteen hundred feet, one thousand feet, my altimeter recorded. It was bitterly cold, and the piercing wind searched through my fur-lined coat as though it were a sieve.

At five hundred feet I judged my altitude best suited for submarine hunting, and I noted several English seaplanes ahead at about the same level. Throwing on my switch, the engine began its work again, and I peered sidewise over the left-hand edge of the cowl into the brownish water.

How was I to distinguish a German submarine from the French or British craft? Suppose I bomb the wrong boat! Then it occurred to me that all the air scouts were in the same predicament, and we had been instructed to drop on the first submersible we discovered. At any rate, we had the advantage over the patrol boats that were searching here and there. We could look straight down, and with the aid of the clear sky overhead the moving submarine could be discovered scores of feet below the surface. The hollow underseas craft are able to withstand the heavy pressure of water down to a depth of only a hundred feet. As I flew farther out into the harbor I observed that the clearer waters of the Channel permitted a deeper view into the depths. In places I distinctly saw the bottom of the sea where the sun's rays hit the surface at the required angle.

For two hours I circled over the clear waters at the mouth of the harbor, sometimes venturing far out as a longitudinal ripple of waves caught my eye and sug-

gested a moving craft beneath. My hands were numb with the cold, and my feet could not feel the control bar, but my machine was a steady, stable flier, and automatically responded to my stiff movements. Pangs of hunger, too, assailed me and made me almost forget the cold.

Only one other member of my squadron had selected my vicinity, though several of the hydroplanes were constantly about us. I was patrolling north and south, each leg of the beat ten or twelve miles. Inshore at a distance of a quarter of a mile from me was one of the four pilots left behind at our flying field. Outside of my beat, and up and down the coast, were skimming other patrols. My engine was beating regularly. I took care to mark out the nearest trawler cruising slowly across our paths in case a sudden stalling dropped me into the sea.

Flying along parallel with my nearest neighbor, I waved to him as he looked across to me with a feeling of more than usual comradeship, for I realized that he, whoever he was, had chosen his path of observation with the same reasoning that had actuated me. He was flying a new Caudron exactly like mine. I determined to sheer in close to him and discover his identity. In another moment we were flying wing and wing.

Just at that instant I had the pleasantest shock of my life. I even forgot the cold weather. Philippe Pieron, the dear Old Dependable, was sitting there opposite me, looking across the thirty or forty feet of space separating us, staring at me as though he were not quite sure whether he ought to get out of my way, or not. I recognized him at once from his flying togs, but mine were new, and I was so muffled up my own mother wouldn't have known me. I took off my goggles and threw back my head and laughed for joy to see old Philippe's expression when he recognized me.

We couldn't do anything but ride along and grin at each other and nod our heads. I wondered what had brought the old boy here! He was still at Buc when he had last written me — working on his aeroplane gun device. Perhaps now he had some new scheme of his own for bombing submarines and had come over to try it on. I sheered away again and turned my attention to my job.

Ten minutes later as I circled back from the southernmost end of my beat, I suddenly observed little puffs of smoke popping out of Philippe's aeroplane gun. He was circling to the right and headed towards the cliffs under Trouville. Though I could not hear the shots through the barking of my exhaust,

I knew he was shooting to attract my attention. I banked sharply over and opened my throttle to the limit and followed in his wake. Then, with a shout of exultation, I recognized between us and the steep corner of the Trouville point the ugly snout of the enemy's periscope trailing a white line of bubbles straight out into the open Channel. Philippe and I were in at the death!

Releasing from its fastening by my left knee one of the long, slender bombs, I hugged it with both stiff hands and laid it tenderly down on my lap. Then, with still greater solicitude, I got it up on to the edge of the cowl and balanced it there with my right arm. Squinting ahead to relocate the periscope where it ripped the water into waves, to my great astonishment and dismay I found that she was no longer in sight! Philippe in his Caudron was circling back much lower down. I gingerly pushed over my controls and followed him. Flattening out at fifty or sixty feet above the water, I again picked up the longitudinal ripple of water following the wake of the submerged craft. Then, suddenly, I was over her and passing her.

Distinctly outlined some twenty feet below the surface, the black mass moved slowly downwards and ahead. Her propeller churned up a fountain of

white bubbles, mingled with shining streaks of oil.

I was over her again now, and with a vicious shove I launched my bomb and steered my machine off to the left. Climbing and spiraling back again to the rear, I heard the crash of my exploding torpedo. A mass of water was hurled violently into the air. Eagerly searching the depths below, I at last distinguished the submarine tranquilly pursuing her way, apparently oblivious of our presence. My bomb had exploded upon impact with the water, but had done no damage whatever to our wily enemy!

Quickly I leveled my machine and let her take her own course while I leaned down and collected my other explosive. I would circle above the craft until my petrol gave out, but I should get a whack at her when she came again to the surface.

Ahead of me Philippe was peering down at the submerged target, an enormous torpedo resting in his arms. Silly of him to waste his ammunition on the surface of the sea! I cut down my speed to the lowest headway I dared risk and watched him.

Down shot his plummet of steel and neatly parted the waters ahead of the laboring submarine. But it did not explode! I could see a whirling metal propeller on the torpedo revolve as it sank. It must miss the craft by twenty feet.

Suddenly a column of water higher than my position in the air stood straight up over the sea, hung ludicrously there for an age, then slipped noiselessly back. By all that is wonderful, how did that happen?

As we covered the spot again and again in our circling machines, we were joined by two more pilots, and finally by a fast clipper steam yacht. The surface of the water was literally covered with oil, breaking up the ripple of the waves and smoothing a huge area into gleaming bronze. Here and there floated a cork belt, odd bunches of cotton waste, a strip of carpet, and a wooden three-legged stool. These fragments alone remained to testify to the *corpus delicti*.

"Philippe," said I, half an hour later, as the hot coffee was thawing out our insides, "what kind of a civilized bomb do you call that?"

"That bears the simple little title of Trinitrotoluol; call it T N T for short," replied Pieron.

"But what made it hang fire so long?" I demanded.

"It's made to work that way. When the bomb begins sinking, the little propeller is turned as it is pulled down through the water. It continues turning until it screws to the end. There it touches the

fuse-pin, and that sets off the high explosive — at any depth you arrange it for.

I regarded him steadfastly. Then I remarked, "But it didn't touch the submarine. I saw it miss."

"Yes, you can miss it for fifty yards and still crush the submarine." He took up an empty eggshell. "The submarine is hollow, like this. She is held rigidly on all her surface by the water. Water is non-compressible, like steel. Now, when the T N T explodes, even some distance away, the violent expanding concussion is communicated to this hollow shell just as though a battering-ram struck it. The submarine can't yield any because the surrounding water holds her in place. So she crumples up — like this."

Pieron opened his hand and the flakes of eggshell fluttered down until they struck the floor.

"And now," I said, throwing my arms around him and giving him a bear's hug, "How in the world did you happen to get over here from Buc to-day?"

"Unloose me and I will tell you," replied Philippe, whacking me affectionately. "I am transferred to this squadron with a commission of Lieutenant. We will stick together now, Arnold — you and I."

"With all my heart," I cried, shaking both his

hands. "And I advise Mr. Boche to give us a wide berth.

"But how about your aeroplane gun, Philippe? You are not going to give that up?"

"No," said Old Dependable, looking cautiously around the room to see that no one was within hearing. "The gun has been selected, and the synchronizer is finished. But keep mum about this, Arnold. Not a soul must know of it until we have all our fighting planes equipped with it. Then the Boches will receive a little surprise that will stagger them."

"But suppose they drop one of our fighting machines so equipped within their lines — won't they discover the new device?" I inquired.

"Yes, but it will be six months before they can copy it and get any number produced," returned my lieutenant. "By that time, we will have other improvements to puzzle them."

"And are we to have your new gun here, Phil? I suppose our squadron will be the first one to use it?"

"Can't tell, young 'un," Pieron responded. "That's some time off. We are to move from here this week and do observing near Soissons. I've asked for you to pilot my machine, and I've got you. That's why I had you designated for this squadron.

They've put us together now, Arnold, and we'll see this thing through," my friend earnestly added. "By the time the new machines are ready next spring, the gun will be ready.

"But let's call the war off now and have a cigarette. Here come the boys."

CHAPTER XI

THE TAIL SPIN

NEXT day was a joyful one to our little training camp near Étrétat. Captain Demain announced after breakfast that we had received orders to vacate our present quarters and remove to a new aerodrome near the front outside of Soissons. We were to leave our Caudrons for the new incoming corps just organized at Pau. Our squadron was to receive the first batch of Nieuports — the newest, fastest, and best designed fighting machines in France. Two or three of them were now awaiting us at our new aerodrome.

Not all of our pilots were to be taken along, however. Some were transferred to the bomb dropping squadrons near Belfort and some were to go into reconnaissance escadrilles at various places along the front. Philippe was sent away by the early train to Paris, and he had just time enough to tell me he was going to collect several expert pilots that he knew of to strengthen our new unit at Soissons when Captain Demain joined him and the automobile left for the station.

Although I had three days' leave, I decided I should not avail myself of it but would go direct to my new aerodrome and get well settled before work began. So after spending one night in Paris with my aunt and shopping with her for an hour or two next morning to get a few articles I needed for the winter, I took a train from the Gare du Nord and set face towards the booming guns of war. At last I was getting into the thick of things!

At the new escadrille quarters, I found several old friends, Ned Yale and Malcolm Berryman, both Americans who had been at Pau with me, several French pilots, and a queer young lad from a little town in the western part of America, named David Green. This latter was something of a mechanical freak and did not mix well with the others. A month later, however, we suddenly changed our opinion of him. It came about in this way.

We had been over the lines several times with our fast Nieuport aeroplanes, armed with the new rapid-fire gun. As they have since been captured by the enemy, no harm can result in describing them. They were not much larger nor heavier than an ordinary rifle, but they fired forty-seven bullets without stopping and at the rate of five hundred per minute. As soon as the forty-seven cartridges were fired, an-

other magazine could be placed on the gun in a couple of seconds and it was ready for another operation. We could discard the water jacket, for the rush of air along the barrel of the gun kept it cool, and thus the entire outfit weighed only twenty-two pounds. This was called the Lewis Gun and was the invention of Colonel I. N. Lewis of Montclair, New Jersey, an American Army officer.

But the difficulty had been in firing such a gun from our aeroplanes. It is no easy matter to shoot from the ground and hit an object which is flying past you at the rate of one hundred feet and more per second. And from another aeroplane also moving at this speed, the difficulty is, of course, twice as great. Add to this the impossibility of shooting straight ahead for fear of breaking your propeller and dropping your own machine to the ground instead of bringing down the enemy, and you will see it leaves but little opportunity for shooting from a tractor aeroplane. And here is where Philippe's synchronizer came in.

He devised a mechanism connecting the trigger of the gun with the propeller shaft and so geared that the hammer could fall on the cartridge only when the propeller blade was out of the way of the bullet. As the propeller turns about fourteen hundred revo-

lutions per minute, that leaves twenty-eight hundred spaces a minute for bullets, while only five hundred of these spaces are needed at most.

So, armed with the new synchronizer, our corps was able to fasten the gun rigidly along the engine hood, pointing dead ahead. One aimed the gun by pointing the aeroplane. With one hand on the control stick and the other on the trigger string, a pilot need only get a line on the enemy aeroplane, steer his machine straight ahead, and at the proper distance pull away on his lanyard.

At present we were getting target practice and waiting for the great day to arrive when we would sally forth in full squadron strength for our first haul of German aeroplanes.

But we frequently went over the enemy lines and familiarized ourselves with Boche tactics, armed with only our revolvers and a carbine. Occasionally some of the pilots would take along a bag of bricks with the idea of throwing one into the Boche's propeller and breaking it. One machine was actually brought down in this way, ludicrous as it may appear.

But to return to David Green, the Kid, as he was called in the escadrille. One morning after breakfast, several of us walked down to the flying field from our quarters and upon reaching the hangar

found Kid David there before us as usual, busily working over his machine.

Malcolm Berryman stopped at the door behind David, and throwing out his arms in Grand Opera fashion, turned around to our group at the entrance and sang soulfully:

“Oh! King David wrote to the Captain of his Hosts,
 ‘If *you* wish to be save-èd,
 You must send old U-riar,
 To the hottest of the fi-er,’
 Signed, yours very truly — Dave-id.”

Malcolm Berryman sang innocently enough, but Kid David, who had heard it before and who possessed a large amount of belligerency for his age, sulkily replied: “Well, he didn’t burn him to death on brandy, anyway!”

A gust from the group greeted this retort courteous and unexpected from the Kid. Berryman had served in the Ambulance Division before joining the Flying Corps. Aspiring for higher medical honors, he had come up for examination before a gruff and suspicious old surgeon who had sternly demanded of the new candidate:

“If you found a badly wounded man on the field, what is the first thing you would do for him?”

“Give him a drink of brandy, sir,” Malcolm replied pleasantly.

“ Well, suppose you didn’t have any brandy ? ”

“ Then I would promise him a drink, sir,” the resourceful Berryman responded. But he was rejected, to his great astonishment; and shortly thereafter discovering he preferred aviation anyway and would never have been happy in the Medical Service, he succeeded in obtaining his brevet in the Air Service and was assigned to our corps.

David Green was the infant of our new squadron and was a strange composition of bashful shrewdness and sensitive self-assurance. He had a speculative, inventive mind and was a born mechanic. While he was not popular in the corps, none of us were too proud to initiate his clever devices for adding to the efficiency of our aeroplanes. Whenever he was off duty he was sure to be in the hangar, working over his machine. The mechanics had more respect for him than for the balance of us put together.

“ What are you putting on those heavy wires for Kid ? ” I demanded, as we all gathered around David’s aeroplane in the hangar.

“ Because I’m going to put her through a long tail spin in about a minute,” replied David, glancing quickly at Captain Demain.

The deadly “ tail spin ” sometimes occurs when the aeroplane gets into too steep a spiral descent. If

the tail can be held rigidly in position with the rudder, the machine of course spirals down the slide as in any volplane dive without rotary motion. Even if one stalls in the air with the tail down, the aeroplane after sliding backwards a hundred feet or so, will gradually level out into a horizontal position if the elevators and ailerons are properly adjusted by the pilot. But often in climbing too steeply, or in turning corners too sharply, the machine may lose headway, and begin to slip sideways. Unless the pilot instantly meets the emergency, the slipping grows into a revolving gyroscopic motion, not unlike the spinning of a leaf as it is sucked down into a whirlpool.

Standing on her nose as a pivot, the machine begins to revolve as gravity pulls her down. The rotating increases in rapidity with each revolution, and usually the wing supports must give way to the centrifugal force, long before the final sickening crash.

When the Kid announced he was going up for the purpose of deliberately putting himself into this danger, the chaffing ceased abruptly. Captain Demain regarded the lad steadily. Every pilot felt in his soul it should not be permitted.

"Have you done this before, Green?" asked Captain Demain.

"I did, yes, sir,— yesterday afternoon — over the German lines," stammered the Kid, blushing.

"How far did you drop?"

"Not very far, sir — I know how to bring her out," said David with eager voice. "There is no danger if you cut off your engine, and reverse your controls. I know I can do it."

"What do you say, Arnold," said the captain walking with me.

"I understand it can be done," I replied, "but none of us here ever attempted it. David will go through with it anyway, next time he is out of sight. He is the nerviest little beggar in the corps." The Captain smiled. "I am going up to Headquarters," he said pointedly. "Probably won't be back for an hour."

The Kid in the meantime was testing the reinforcements he had added to his control wires and elevators. "There's where the strain is bound to come," he was saying shyly. "Of course, everything will break if you drop far enough, but you can tell when you'd better come out of it."

Ten minutes later we veterans of the corps were standing "nose in the air," watching the Nieuport sweep upwards.

"Old Eli" Yale took his pipe from his mouth,

as David, in his machine, was rapidly climbing overhead.

"Do you know, this bit of a trick may come in handy sometimes. I'm going up and try it on just as soon as the Kid comes down."

"So shall I," I replied.

"I wouldn't, until you strengthen your elevators and ailerons and rudder, sir," volunteered Brownie, my mechanic, who was standing, besmirched with engine grease as usual, by my side. "He's been working on his all the morning," indicating the Nieuport aloft.

Reaching a height of six thousand feet, as it seemed to us from our position in front of the hangar, David cut off his spark, and we could hear only the hum of his revolving propeller. Gradually this died away, and just as his gleaming wings seemed stationary above us, he nosed down and shot a thousand feet on a steep glide. Flattening her out, he swooped gracefully up the circle and over into a perfect loop-the-loop.

"A little extra 'swank' the kid is throwing in!" muttered Malcolm at my elbow. The rest of us stood motionless and watchful.

Instead of straightening her out to the horizontal, David continued to head vertically up, and grimly

he held the aeroplane pointing heavenward until the last inch of momentum was gone.

Breathless, we watched him through our glasses. The dead weight of over half a ton was hanging there motionless, tail down, a mile over our heads.

Gradually she slid down backwards, David lying flat on his back in his seat, his face pointing upwards, although these details were beyond our vision. When the falling mass had attained sufficient momentum, a flip of his controls turned her sideways, and the tail still down, the aeroplane began to revolve slowly as the air forced its way between the slanting planes.

Fascinated, we let our cigarettes burn our fingers as we glued our eyes to the glasses. Now the pressure of the air forced the tail straight up and the nose pointed down. Faster and faster the aeroplane dropped and whirled, pivoting about from left to right on the lower left-hand corner of her wind. Now she stood nose perpendicularly down, the gyrating tail cutting short circles about the pivot. A thousand, two thousand feet she fell, the dizzy whirling increasing frightfully. Suddenly, when cold fear began clutching our hearts and I personally realized I was little better than a murderer, the rotating, gleaming wings took a wider curve, the tail began to force itself down and with a swooping half circle, the

aeroplane glided away upright on her keel less than a thousand feet above the ground.

Again nosing her down, David switched on his spark and after a few spasmodic barks, the engine caught and merrily roared.

With our nonchalance pretty well shattered in the common anxiety of the last few moments, we looked at each other with frightened faces.

"Bet he won't come back till you all are at mess," grinned Brownie, pointing skyward with a shrug of his shoulders.

We looked up. The Kid was blithely disappearing over the hangar. He was too bashful to face an appreciative audience.

"Well, how did it go?" inquired Captain Demail as we all assembled at lunch. "And where is the Kid?"

"He got away with it. He will be back when his petrol gives out," I returned. "We are going to have a busy afternoon. Every man in the corps is burning to master the tail spin."

David slid into his chair while we were over our coffee. He kept his eyes nervously on his plate and gave his order.

Old Eli tossed a cigarette over to him and said, "Kid, I desire to retain you for twenty minutes after

lunch. What do you charge for your services?"

"Oh, bother, you!" rejoined David.

"Here, no more ragging," said Captain Demain.

"David you have put one over on the whole squadron. I had no business to let you do it, but I knew you could take care of yourself. Now, we are going to have a little schooling this afternoon, and I wish you would explain to me just how you get out of that whirl."

"No trick at all," replied David. "Yesterday, when we were over the German lines, I lost you fellows, and before I knew it I was in a mess with four or five of the Fokkers. I was chasing one of their heavy busses and didn't see the Fokkers until they began potting me. I shot away all my cartridges and then tried to get back towards home. Four or five of them got me corralled and I had to climb over them. I got into too steep a climb and stalled. Before I could look around to see where I could go, they were all on top of me. My machine turned over and fell and began to spin. In no time at all I dropped away from the Huns, and then I began to wonder what to do."

The Kid took up his soup spoon to illustrate and we watched him attentively.

"My engine was pulling strong, but the propeller

wouldn't take hold of the air. So I cut off the engine, and right away a different sort of spinning began. But still she wouldn't mind the rudder. I couldn't control the tail. So I shoved the joy-stick the other way, lifted my elevators, and then reversed the ailerons and rudder slowly. They nearly gave way, but not quite. She slid out of the whirlpool and hung there until I got her pointed down and started my engine again. That's all there is to it."

David placidly swallowed his soup without looking about the table. Captain Demain had followed his story as all of us had, with intense concentration.

Here was a solution of a deadly problem. Every one of us had seen a pilot surrounded and shot down by superior numbers. Every one had seen the fatal tail spin overwhelm and dash to destruction some unfortunate airman. Every one of us now realized that we could make one peril the escape from the other, for such a sudden drop, as David had described, would bring one to a lower level and enable him to evade his pursuers before they could recover their advantage.

At the beginning of the war dangerous "stunts" were frowned upon by the officers. Even loop-the-loop was considered an unnecessary and foolish lark. Gradually, it was becoming recognized that the abil-

ity to put the aeroplane through these perilous positions enabled the pilot to save himself when uncontrollable circumstances forced these situations upon him. Every difficult maneuver mastered by the pilot gave him that much superiority over his inexperienced enemy.

David's extraordinary presence of mind had saved him from the expected catastrophe and had enabled him to teach us how to come out of this difficulty; it might permit us to far exceed in the future the usual limits of aeroplane attack and defense.

As soon as David finished his coffee he was surrounded, patted on the back, and escorted down to the flying field by the entire mess. Suspicious at first of this unexpected kindness and accustomed since his introduction to the corps to the constant raillery of the older men, David tried to be haughty and dignified. Before we reached the end of the lane however, the boy succumbed to our genuine admiration and praise. Beaming with gratitude, then, he was almost unable to control his happiness.

One by one we ran our Nieuports out of the hangar. With an indifference more or less thinly put on, we examined the strengthened controls and turn-buckles, wires and fastenings. David was the first away. The devoted little chap would gladly sacrifice him-

self to show his appreciation of the corps' generosity.

"Take it easy, Arnold," said Captain Demain, coming up to us in turn. "Try it on gradually. Don't let her get away from you until you have satisfied yourself you can handle her. We can't spare you just yet."

"No flowers, please," I replied, imitating a pilot trying to look at ease.

At the beginning of the war, Germany easily out-ranked all other nations in her flying machines. Count Zeppelin, after repeated failures, had become the idol of the German people when he perfected the greatest air cruiser the world had ever seen, the L 5. In the aeroplane industry, the German Mercedes engine ranked supreme. This engine had won the world's record in making an altitude flight of over twenty-six thousand feet, and had won the duration record by flying continuously for almost twenty-five hours.

In aeroplane design there was longer any secret, for the required supporting surface of the wings was reduced to a formula, the element of speed was obtained by the slant of the wings plus the reduction of resistance through stream lining, plus the addition of engine power.

Engine power! There was the rub! Though the

Mercedes engine could be imitated, the copies lacked the conscientious hand work that the methodical Germans employed. So the heavy Mercedes model was abandoned, and France, England, and America experimented with scores of different types, straining to produce an engine that would prove superior to the German.

The Fokker aeroplane was the best of the new German fighting planes. Equipped with the stalwart Mercedes engine, small of span and quick in motion, the Fokker's favorite position was high in the clouds where he had a perch from which he surveyed the world below. Circling about, an invisible speck in the sky or hiding behind the screen of some convenient clouds, the Fokker pilots awaited the oncoming of our air scouts and protected the expeditions of their own observers and photographers lower down.

Gathering together for an attack, several of these hovering hawks would dart down through the clouds upon an unsuspecting scout below. With engine cut off their approach is noiseless — but swift. So swift, in fact, that less than one second elapses from the time they reach an aiming distance of two hundred feet, until they pass under their target and away. Their speed of one hundred and sixty miles

154 ARNOLD ADAIR, AMERICAN ACE

an hour on these downward dives covers over two hundred and fifty feet every second.

Target shooting under such conditions is not often accurate. Though the entire target consists of a fragile framework, twenty-four feet across the wings and twenty feet to the tip of the tail, bullet holes may make a sieve of the fabric and body, may cut away wires, rudder, spars, struts and propeller and still enable a skillful pilot to glide miles away down to a place of safety. The only points of real vulnerability in the modern warplane are the fuel tank and the pilot who sits atop of it. Even these objects will survive many punctures, as is demonstrated in every day's work at the front.

Outnumbered in this way and caught in an inferior position, the besieged pilot must be clever indeed to escape. He finds alert enemies awaiting him at every corner, stalking him from above in a superior berth and encircling him whichever way he turns. David had graphically described to the mess how any one of us might on some occasions, find this sudden tumble the sole means of evading destruction. By practicing the tail spin, and becoming familiar with its difficulties and surmounting them, our Flying Corps was possessed of an emergency exit that immensely appealed to all of us.

One after another we spiraled aloft, and after reaching an altitude where we had plenty of room in which to experiment, we stalled the machine, fell off onto the wing and began the dizzy spin.

A small amount of this exercise seems uncommonly ample to a beginner. Little by little we increased the fall and the whirl, came out with a glide, and dropped down to the flying field to examine our wires and to think it over.

Again and again we climbed up with new confidence and with more assurance; ultimately we flung our machines with reckless abandon into every known impossible position. Every experiment gave us greater knowledge of the aeroplane and more confidence in ourselves. A more ludicrous exhibition of falling aeroplanes never before entertained so large a field of gaping French poilus and mechanics as gathered in front of our hangars that sunny afternoon. Without one accident to mar this gala day, we finally brought in our gallant mounts and turned them over to admiring mechanics for a rub-down.

A self-satisfied group of swaggering aviators strolled together up the lane to escadrille headquarters that evening.

Needless to say, David Green had become our hero and our pet.

As our family gathered round the phonograph that night and we filled our pipes from the Lancer's pouch, David slid out a record from the pile and held it up.

"Shall I put on the 'Chicken Reel'?" the Kid inquired, looking around the group.

"You put on any dinged thing you want, King David," replied Malcolm Berryman, the flaring match lighting up his good-humored face. "You are the Captain of the Hosts to-night."

CHAPTER XII

OUR SURPRISE PARTY

WE had a mild week the last of March, and the weather, though cold, was excellent for flying. Consequently the Huns were becoming bothersome, and we saw plenty of hostile aircraft. Not only in our daily reconnaissance expeditions over the German lines, where Philippe and I spent most of our day, but often over our own territory we saw first the white puffs of shell smoke far up in the sky, indicating to us one of the enemy airmen who had been discovered by the French gunners, and then the tiny speck of our visitor's machine. Our anti-aircraft shells threw out a cloud of white smoke upon bursting, thus distinguishing the French from the German shells, which explode with an accompanying puff of black smoke.

As soon as these smoke bursts appear, our fighting planes see them if they are in the vicinity, and singly or in groups our pilots gather in to give chase to the visitors. Often we get a bomb in our aerodrome from one of these raiders, who has sneaked over our

lines high up above the shelter of the clouds. Getting in our rear, the Boche drops down through the clouds and points back towards home. As he passes over our field he dives down as low as he dares, lets go his bombs, and continues on homewards at top speed. Unless one of our faster aeroplanes happens to be up and gets on his trail in time, there is no chance of catching him. It is useless to leave the ground and try to overtake him, if he is already three or four thousand feet higher up.

After dinner Monday night we were called in to the Commander's office. None of us had an idea what was on, but a corps consultation always promises something interesting and we were all eager for action. The first word Captain Demain said satisfied us as to that, and we sat forward with alacrity.

"Fighting machines to-morrow, gentlemen! Everybody! Be in your places at six. And remember now your instructions about keeping in formation. It will be doubly important to-morrow. We want to surprise the Boches, and we don't want a man of you cut off by himself under any circumstances. Report to your own Flight Commanders in the morning ready for service. Sergeant Adair will be acting Flight Commander of the Fourth Squadron,

Dismissed! Officers will please remain. You too, Adair!"

Philippe, Lieutenant Meancourt and I stayed after the rest of the boys had withdrawn. Then Captain Demain unfolded the plans for the morrow. For an hour we talked and smoked, and I found to my great satisfaction that the long expected début of the new invention was to be left solely to our escadrille.

Next morning I was up at three, and as I reached the door of my hangar I found that most of my squad were there before me. We each went over every minutest detail of our machines, our guns and ammunition. Half an hour before daylight, we were summoned back to breakfast.

It was a cloudy day but not excessively windy, and as we climbed into our machines, I noticed the low clouds above were slowly moving northwards over the German lines. Four pilots besides myself were assigned to my squad. As Flight Leader, I formed the front apex of my formation, Yale and Green followed on my left, and Arrowdale and Berryman on my right, each a hundred yards or so to the rear of the preceding machine, a little below and a little outside, thus forming an inverted "V" shaped flying unit similar to that of a flock of wild ducks.

Philippe had suggested as my objective the aero-

drome of the famous Eleventh Escadrille of the German Air Service, situated, as we knew, in a level valley northeast of St. Quentin. Philippe's squad would be not far east of us over another German flying field. Lieutenant Meancourt was to sit over the trenches looking for enemy observing machines, while Captain Demain and his formation were to cover a sector of the front further east, where the Boches had been busy of late.

As we mounted up to twelve thousand feet, I found we were above the clouds. I reduced my gas and loafed along until I saw, one after another, the last of my squad pop up through the gray mist and take his place in formation. Then dipping my wings as a signal to start, I put on the sauce, and we forged ahead.

The sun shone warmly over a sea of billowy clouds at my right. While I was watching it, I suddenly noticed several planes burst through the floor and take a course a little lower down than mine, but almost parallel with it. This was Pieron and his squad.

Ten minutes later they had disappeared from view. I glanced at my instruments. Still fifteen minutes to go to reach my objective. Philippe evidently intended getting under to watch the ground as he flew along.

But the next instant I saw the answer. We were coming to the end of the clouds. We climbed up over one big floating billow of thin white mist and on the other side found the city of St. Quentin just beginning to glow with the first rays of the sun. The following wind had carried us faster than I had anticipated.

Dipping to the right, I signaled my squad to follow. In perfect formation they came, and cutting off my motor, I pointed the nose down to the distant aerodrome of Number 11.

We were still three miles away when I noticed arising from the flying field ahead a long line of their agile Fokkers. One by one the gleaming planes moved forward, and suddenly pointing upwards, began their climb towards us and lost themselves to our view as they turned their thin edges towards us. Several larger machines were still waiting on the field, after the last of the Fokkers had departed. These were two-seater observing planes, which would begin their work as soon as their patrolling scouts had reached their elevation. Now the gleam of the sun shone on the wings of the rising Fokkers as they turned and still climbing, spiraled back towards their field. I dipped another signal to my squad and pulling open the throttle, dived headlong at the unsuspect-

ing Huns. It had turned out even better than I had planned! They would not dream of our little squad attacking such numbers.

At six thousand feet above their little valley we came upon them. Five against fifteen — no wonder they didn't try to escape. I selected their squadron leader as he was at the highest level, and as he saw us coming he flattened out into a wide circle and counted us carefully. Then with a contemptuous gesture he came back against the wind and we passed each other. At ten paces I let fly, but a bit too late. I simply cut his rudder away. I looked back. He was volplaning clumsily down for a safe landing when of a sudden, he pitched violently forward and down he went in a tail spin to a certain smash. Arrowdale and Berryman had swung far around me. Eli was in the thick of it below me, while David Green was fumbling with his machine gun off to my left. Evidently it had jammed. No, that was Berryman, working over his gun. David and Arrowdale were together.

Darting into Yale's vicinity, I came face to face with one of the eager Huns, who was leaning out over the edge of his cockpit, aiming his revolver at Eli's machine. I got my sights dead upon him and pulled my lanyard. Sweeping by to the right, I just



Another Machine was Falling in Flames ahead of Me,
as I Came Around. *Page 163*

caught a glimpse of the pistol dropping overboard from his hand as he threw his arms above his head. His aeroplane turned sharply over, and at my next glance around was falling in a virille to the ground. I had shot my first enemy!

Another machine was falling in flames ahead of me, as I came around. Old Eli had shot down his man! David was pursuing another some distance ahead. Malcolm and Arrowdale were in the center of two groups of encircling Fokkers. I swerved over to the rescue.

Huddled down low in my seat, I fixed my sights on the revolving circus as I approached and sent forward a stream of lead to precede me. Suddenly one, then another of Malcolm's enemies deserted him. He had dropped one, and I had shattered another's propeller. Both were falling, but they were not out of control. Eli Yale circled across my front and waved a hasty gesture of victory. His goggles were off and both gloves discarded. He was eyeing a Boche who was maneuvering for a shot at me. I watched them out of a corner of my eye as I replaced a full magazine on my gun.

They were beginning to realize, these Boches, that it was unsafe to stay in front of our machines. Heretofore that had been their safest position. Twice in

the last ten minutes I had seen looks of alarm directed at my gun as a darting Fokker dove past me. Our flying fight had spread over the entire width of the valley. It was becoming impossible to get within range of our humiliated enemies. Suddenly I saw David flit past me as I was circling round and round my wily friend of the last ten minutes. I looked after the kid quickly and saw rising up to join us, a huge biplane — a two-seater — with a gunner in front and a pilot behind.

I dipped over to the left and left my Boche antagonist to his own devices, while I went down to help David make sure of this dangerous opponent. But I was too late. The young American from the far West had brought down his big prize the first attack. Over and over again the biplane rolled as she fell, and long before the final crash ensued, David and I were climbing back again to our postponed engagements.

Drunk with our enormous success, we stayed over this ill-fated field of Squadron Number 11 until the last enemy plane sought safety in their hangars. Not one of them dared venture forth. Despite their anti-aircraft guns, which took up a lively bombardment as soon as their aeroplanes left the sky, we shot down low after the last one of the fleeing Huns and

poured furious streams of bullets into his disappearing tail. Then with a glance at my gasoline gauge, I signaled my jubilant little squad and falling into soldierly formation, our victorious Nieuports headed back for Soissons. It had been a busy morning. But what a whacking victory!

We basked in the plaudits of our enthusiastic mechanics, while we sat on boxes of ammunition in our hangar, and tried to add up our scores. David, the bashful little beggar, had taken first prize — he had bagged the big fellow. He also had forced down two others of which he was certain. But these could not be counted. They were vanquished, but not demolished.

Yale and Arrowdale, our old veteran, likewise had one each, besides a score of others they thought would never be able to fly again. Malcolm had run into bad luck with his gun jamming, and he was cursing mad. Not one of us had suffered ever a bullet hole through the fabric. It was a slaughter.

“Well, never mind, my old ones,” I said to them. “None of us will get any credit for our scores. Nobody saw them fall but ourselves. But we’ve had a lovely day. Malcolm,” I added, “if you had selected your cartridges this morning as we did, you would have had less trouble with your gun.”

"Right, Solomon!" Berryman retorted sheepishly.
"Don't rub it in."

"How many did you get, Arnold?" inquired David, changing the subject generously.

"Two," I announced, trying to speak indifferently.
"The Boche captain was the first one I shot at, and the scared Hun who caught fire, I think was mine."

"That makes three for you then, Arnold," said Yale, slapping me violently on the back. "Maybe you forget the big Bologna who had a bead on me when you dropped him — but I don't."

A rush to the hangar door by the delighted mechanics announced the return of another squad. It was Meancourt. Immediately behind him appeared Captain Demain with his formation, and ten minutes later my old chum Philippe appeared in the sky with his five followers tacked on behind him, flying like one mechanism.

Everybody lost his dignity when the whole fighting squadron assembled, and it was found not one was missing. Rapid questions and answer volleyed back and forth amid much running about and many extravagant bursts of hilarity.

Finally I found myself confronted by Captain Henri Demain, who clutched my two tender ears in his great fists.

“ Arnold,” he roared, “ you are one little dead shot. You’ve got the high score ! ”

“ Up with him, boys ! Carry him to the mess hall, and we’ll open up a bottle in his honor. Three for Adair out of a total of thirty-two of the Huns in one day ! Some surprise party ! And with one swing around my middle, the Captain flung me sprawling on to the shoulders of the yelling mob while tears of pain or gratitude crept resistlessly to my eyes.

CHAPTER XIII

A BATTLE ROYAL

IT was a mild Monday evening of April, and we were all smoking out in our front yard after mess. Philippe Pieron had just come out of his office and crossed over to our group around the phonograph, goose-stepping comically to the cadences of "Nigger Loves a 'Possum." Old Eli, lying back with both elbows in the grass, waved his pipe in the air and tromboned him along with his heavy bass voice until somebody threw a blanket over his head. Some others of the gentlemen present then contributed their priceless pieces of wit, while some, scowling over their letter-writing, exchanged vituperative remarks with the nearest interrupter of their peace and quiet. Philippe made straight for me and sat down on my box beside me.

Of the twenty men in our squadron, twelve of us were pretty well in. We had just returned from fourteen hours' almost continuous shell-dodging over the front. Philippe Pieron was my observer here. That is, he was in charge of our constant surveillance

over that sector of the enemy's front running west of Soissons for eight miles. There's a bit of woods and rough ground here along the Oise River, and Fritz is always hiding a choice battery or two in there. For several weeks I had been carrying Philippe over this ground morning, noon, and night in my two-seater biplane. We were in camp near Senlis, almost forty miles from the trenches and about the same distance from Paris as the airplane flies. Other airdromes were between us and the trenches, and we frequently made use of their convenient landing-grounds for replenishing our fuel and sending telephone communications to headquarters.

The observers' duties are to map out the enemy's positions, the new trenches, roads, machine-gun emplacements, hidden artillery, depots of supplies, railways, and other points of military value. Philippe was a perfect wonder at this work.

I piloted our two-seater Caudron from the rear, while Philippe sat in front of me and directed my course. I had only to dodge the bursting shrapnel and at the same time keep an eye out for hostile aircraft. Philippe kept his map on his knees, spread smoothly out on a board. With his field-glasses he scrutinized the ground below, and immediately sketched in on his map any alteration in the position

since yesterday's inspection. Little squares on the map indicate to our artillery the exact location of enemy positions of importance.

For almost a year the opposing forces had been eyeing each other across "No Man's Land." Content with this situation, the French were busily engaged in strengthening their lines, increasing their resources, multiplying their soldiers. Satisfied with their position, the Germans were releasing their reserve troops and hurrying them back across the Fatherland to face Russia and the Balkans.

Little information of the progress of the war came to our ears. We had our work cut out for us on a certain geographical square, and day after day we finished that work and turned in.

The original membership of the Étrétat corps was scattered and never would be reassembled. Some had become officers in command of other sectors, some were lying in distant hospitals, in prison camps, and in unmarked graves. Of our early escadrille, formed by Captain Demain, who was now Colonel Demain, only Pieron and myself remained.

"Compliments on your death-defying act to-day, Eli," Philippe drawled, looking down on the tranquil figure of Ned Yale stretched out full length on the grass. "A grateful people thank you."

“Don’t mention it,” Ned returned easily, never moving an eyelash. “Of course, if you insist upon giving me a pipe load of your mixture, I’ll just simply take it, and a match too, Phil — there’s a dear fellow!”

Philippe threw his tobacco pouch at Yale’s head and said grimly.

“One can’t express a decent sentiment without being hung up for it by some people. Perfectly callous, isn’t he, Arnold?”

Eli was up photographing late this afternoon and by a lucky chance found himself near us — Philippe and me — when we were bit neatly by a big shell in full flight. I actually heard the thing whine as it passed my ear, and though for an instant I didn’t know what had happened to us, I instinctively connected our disaster with the shell whine as I cut off my gas and looked hastily back at the engine.

It was ablaze!

One propeller blade had been carried away by the shell, and we were a full ten miles back of the trenches inside the enemy lines. What was worse,— distinctly worse, we were over six thousand feet in the air and were on fire! The sudden lightening of the load on my propeller shaft had made it race, causing

a backfire from the exhaust, and the carburetor had been ignited! We were in for it.

I stood her on her nose the next second so that our onward motion would fan the flames backwards and away from us. I sat with my back to the engine and Philippe was ahead of me. He whirled about and looked at the flames and the black smoke streaming back along the tail of our machine, then looked inquiringly at me. I yelled something at him, I don't remember what it was, and shook my head.

The wind was in our faces and we must keep it there to beat back the flames, but unhappily we were headed away from home and every step we went carried us deeper into the German lines. I looked ahead. If she lasted long enough I could make the center of the woods which lay spread before us, the near edge of which we had just been inspecting before the shell struck us. It would be better to risk breaking our necks in the trees than to invite certain capture in the open.

Phil handed back his notebook and some maps and motioned to me to help tear them up. He had already let go one carrier pigeon with a message some minutes before our accident. Steadying my control with one knee, I took off my gloves and ripped open the notebook. Tearing the pages across and across

until they were tiny squares in size, I threw the fragments into the wind. The maps and drawings went likewise. Then I got my letters out of my pockets and destroyed them. Yale came sliding by in his big Voisin and turned his eyes, dull with horror, upon mine, as he swooped past us.

Bursting shells were literally filling our path ahead of us. The implacable Boches would not even relax to watch a blazing aeroplane fall. I suppose they really wanted Yale's machine. Eli realized this, too, and swept away ahead of us. Our planes were riddled with bullet holes as we crossed the edge of the woods and the last of my writings had been destroyed. We were not a thousand feet up.

Philippe made frantic gestures to the generous Eli as he passed us again over the shelter of the trees, ordering him to return to our lines and leave us. But the daring fellow simply shook his head. Flying lower as he darted ahead of us, he circled wide over the trees, noting the lay of the land beneath and the location of the enemy gunners and infantrymen.

I unbuckled my belt and reaching forward, slapped Philippe on the shoulder and motioned him to get ready.

He reached back and grasped my hand for a farewell squeeze. I grinned at him as hopefully as I

could, then set about carefully selecting a landing place.

We were near enough the ground now to clearly distinguish the hidden batteries of the Huns as we passed them over. Small good to us this information was now, however. I barely glanced at the groups of gunners firing at us through the occasional openings in the woods as we rushed past. There, a quarter of a mile ahead was a cleared stretch. Could we make it? Eli was already circling above it, inviting me to make my landing there.

Two hundred — one hundred — down to fifty feet we dropped until I began to feel I could reach out and touch the tree tops slipping by beneath us. I pulled back my elevators to ease her down. Heavens! The control stick wobbled foolishly! The wires were broken! My machine was absolutely out of control!

I noticed Phil looking back at me in wonder. Then I was conscious that we were over the open space and passing it. The next instant the wheels and under carriage ripped through the tree tops opposite, and Philippe and I did a double somersault together through space at eighty miles per hour!

But not far. Still whirling like a football, my head between my knees, I collided with a wall of

branches. Instinctively I opened my arms and grabbed at them for support. Still slipping and sliding, I suddenly landed on my back with a thump that knocked the breath out of me. The next I knew, Phil was standing over me, pulling me to my feet.

"Hurt?" asks Phil.

I gulped, got to my feet and felt myself all over. Philippe pinched my arms and legs and whirled me about.

"Quit it!" I managed to gasp. "I'm all right."

"Then run for it," said he. "We must separate and hide until night. Meet on the river just before daylight by the three mills if possible. Good-by, old boy." By what miracle Phil had escaped death I had no time to inquire, I didn't even pause to consider my own luck.

I heard shouts behind us as we slid off through the tree trunks. Our ill-fated aeroplane had lodged in the trees overhead and was now blazing up in a prodigious display. In no time the woods would be swarming with Huns.

"Arnold! Phil!! Hurry!!! Come to the clearing!"

It was Ned Yale! No mistaking that hoarse bel-
lowing! I stopped and called across to Philippe.

Should we chance it? Ned had evidently landed back of us and we might yet both get away in his capacious old bus.

"Come on, Phil. I'm going to him," I yelled as I turned in my tracks and ran for all I was worth back to the clearing. As I burst through one edge of the woods, Philippe appeared at another opening, and together we raced through the underbrush, neck and neck to the finish.

And then I groaned aloud. The whole clearing was not two hundred yards across and it was completely covered with stumps and underbrush almost waist high. It would be impossible to lift a heavily loaded machine over the trees in this space. We were all three doomed!

"Lend a hand, Arnold," yelled Eli, who was heaving away on his machine — the tail on his shoulder. "There's a road not twenty paces ahead that will give us room. Now, heave-ho!"

Frantically the three of us pulled, pushed, lifted and carried. Once on the road it went easier. But precious minutes had passed. Running her back to the very edge of the clearing, Ned swung around his tail and leaped into his seat. As I sprang to the propeller, Philippe stood and scanned the edge of the woods above which our faithful old Caudron was still



As She Began to Move in Spite of Me, I Clutched the Edge of the Cockpit and
Swung in beside Philippe. *Page 177*

blazing fiercely. Through the trees I could see running figures and a squad of cavalrymen.

"Let her go, Arnold!" shouted Philippe, climbing into the front seat and turning the machine gun around to the left. I swung down with all my strength. The heavy propeller barely turned over.

"Once more, Old Scout," Eli's heavy voice boomed. Rifles were sounding across the clearing, and bullets spat against the leaves around my head as I balanced my weight for another heave. Then I heard the rat-tat-tat of Philippe's machine gun, which in turn was drowned out by the majestic roar of our powerful engine, and dropping on my face, I scrambled under the right hand wing and reached the front of the machine.

Back and forth across the edge of the timber, Philippe was spraying a stream of bullets. I eyed the path ahead of us without much animation. A worse landing field I have never seen. How Eli ever came down here without a total smash is beyond me.

With all my strength I held back on the trembling frame of the machine while Ned fed in the gas. Finally, as she began to move in spite of me, I clutched the edge of the cockpit and swung in beside Philippe.

Ignoring the rifle shots from the woods, we glued

our eyes on the bumpy road ahead. The rim of trees beyond seemed miles high. We could never lift her out!

Absolutely fascinated with the threatening branches ahead of us, Philippe and I both leaned forward and watched their swift approach! Then the last miracle of the day happened! We had all of us forgotten the wind. As we rose to the edge of the tree tops, we hit squarely into the teeth of an onpouring wind. The big bus wavered an instant, tipped horribly to the right — then recovering her stride, plunged madly through the switching branches, raking her undercarriage and scraping her tail along the last obstacles as she left them.

We were free!

Too drunk with excitement to notice the shell bursts about us, we steered a straight course for our aerodrome. As we crossed the Oise, Philippe pointed delightedly at the three stone mills standing in a group by the water's edge. I blew them an ecstatic kiss and leaned back contentedly in my corner.

As we crossed the trenches, our valiant craft received several more trifling little souvenirs from the cheated Huns below. But we laughed aloud at them with each puncture. Our own aerodrome was in sight!

A more amazed workshop of mechanics never before set eyes on a homecoming aeroplane, as the three of us climbed out of our bedraggled old bus just as the sun was setting. All the others were in and were getting anxious about us. Each of us walked to our quarters, the center of an incredulous group of pilots. It was a hilarious supper that followed.

After supper Philippe disappeared into the Captain's office to redraw his maps and to indicate upon them the location of the German batteries we had so fortunately discovered this afternoon. We had not seen each other since landing, and he had just joined me for a last pipe before bedtime, to tell me he and I were to cover the same ground to-morrow morning to verify his maps.

"Well, I am going to turn in," said Philippe, yawning luxuriously. "Feeling fit, old Indian?" he said to me as he rose.

"Never felt better in my life — excepting that moment I heard old Eli bawling in the clearing this afternoon," I replied, looking down at Ned on his rug.

"Rotten voice he's got," murmured Philippe, kicking the prostrate Yale in the ribs as he passed him. "See you in the morning."

Next morning at daybreak we met in high spirits over our coffee, and after a hurried discussion of

plans we all walked down to the hangars together. The entire corps was to go out to protect us this morning. The Captain thought it would be safer. Usually we divided into two shifts of two or three hours each. Orders given us at breakfast indicated that something out of the ordinary was expected to happen.

Our three two-seaters, accommodating pilot and observer, were to take their usual route. A staff officer was substituted in place of Lieutenant Meancourt in Yale's machine. Philippe and I had the center of the field, Arrowdale had the left, and Yale the right. Before the observers leave the ground, the lighter defending scout planes climb up to a high position among the clouds and sit there, watching for enemy aircraft. Following the observers wherever they go, the defenders swoop down and intervene when the German fighting machines appear. It is not the business of the observing officer and his pilot to fight. They have information to deliver, and must take no unnecessary risks. The trained observer is a highly skilled officer, whose loss is far more serious than that of the ordinary pilot.

At eight thousand feet the pilot and observer in their comparatively slow-moving machine are safely above rifle and machine-gun fire. But at this height

they cannot distinguish the surface of the ground with clearness sufficient to identify small objects, nor can they take photographs of any value. To fly at four or five hundred feet altitude over the enemy would be ideal for photographing and observing, but would likewise be suicide for photographer or observer and pilot. A happy, or rather unhappy, mean of two thousand to four thousand feet is the unsatisfactory but favorite compromise.

Where necessity demands a lower flight, it must be taken. If prudence dictates a higher level in crossing a zone of unusual deadliness, it is a foolish blunder to ignore it.

My lieutenant gave me the word "Skidoo," and we were off. Arrowdale and Yale followed us at one-minute intervals. Circling and climbing, we passed above the horizon and into the rays of the morning sun. Philippe could do the steering as well as I by means of the dual control. In case of accident to me, he would still be able to bring the airplane safely to ground.

Over the trenches we sailed, with never an enemy plane in sight. We were greeted with the usual bursts of shrapnel, through which I dodged, sometimes diving, sometimes rocking up and down, in order to keep them guessing as to our exact range.

Yellow puffs, black puffs, white puffs — thousands of dollars' worth of valuable ammunition was wasted on us by the exasperated Huns below. Each explosion was watched by the enemy gunners under the trees and the next shot corrected in range.

The next shot found us several hundred yards away, however. It is pure luck on both sides — a lucky shot or a lucky dodge — that controls the scoring. My guess is that less than one thousandth of one per cent. of these shots hit a plane.

Passing over the first, second, and third line trenches, Philippe tranquilly studied the ground below with his glasses. Nothing new seemed to require closer attention along here. I circled and returned on a path three or four hundred yards west of our first trail. Old Eli and Arrowdale were both visible and both in the center of a bouquet of smoke bursts. Our scouts could be seen, tiny specks up against the white clouds above.

Suddenly I felt Philippe cut off the spark; we nosed down and Philippe pointed ahead. I could see nothing; but held her to the direction indicated and waited.

We were ten miles back of No-Man's-Land and over the scattered bit of woodland. The altimeter had dropped down to one thousand five hundred feet

before I could discern through the bushes below a dim road leading into a clump of wilted oak trees. I quickly flattened out the machine until I caught the spot with the camera, and then looked about for the best way out. Now that our engine was not running and the propeller was lagging slowly, I heard the furious cannonading from all the adjacent field guns below us. Philippe was sketching in his map the newly discovered battery among the oak trees. Our position was getting a trifle hot.

Switching on the engine, I dove down toward the thinnest fire and flew over them at less than a thousand feet. Swinging back and forth, we cut over one of their observation balloons in front of us at about twelve hundred feet. As we approached, I noticed with much amusement the frightened faces of the German officers in the basket, making ready to leap overboard with their parachutes. I swerved towards them and emptied my automatic into their baskets, our airplane just missing their tether rope as we passed them. We both cheered them cordially as they plunged over the sides for the parachute jump.

Climbing back in long spirals, we again crossed the trenches and again circled back into their territory. Arrowdale and his observer passed us close by and waved their arms to us, indicating that they were

going home. We searched the sky in their sector of the field, but could discover no signs of the Boches. They were crippled by a shell, most likely, or perhaps had some engine trouble.

Crossing the Oise River west of La Fère, we noticed that the white highway ahead, leading to the bridge, was filled with moving motor cars and artillery. This was in the rear of Arrowdale's beat, but he evidently had not reached so far. I turned the machine toward the west and throttled her down. Philippe surveyed the advancing column through his glasses and headed our bus towards their rear. For four or five miles the winding road was black with the Germans. What could their objective be?

While pleasantly turning over various conjectures in my mind I was suddenly awakened by a gesture from Philippe. Swooping down upon us from behind a cloud in the north were fully a dozen Aviatrics! Behind us were several other hostile aircraft, calculating to cut us off from escape! We were thirty miles back of the trenches. How many of our scouts had followed us? . . . We had blundered right into their trap!

As I banked over to the left I saw Philippe leaning down to his board, busily writing. A moment later he folded up the thin piece of paper, glanced about at

the pursuers, and drew from the box at his feet Pearly White, our mascot and constant traveling companion — one of the corps' trained carrier pigeons. Fastening the paper to her leg by a rubber band, he stroked her gently once or twice and tossed her high in the air. No matter what happened to us now, our morning's observation would be in camp in a twinkling.

Often we had been caught in this same mess, and always so far had come through unscathed. A feeling of contempt for our Boche enemies often permitted us to venture deeper into their territory than was prudent. But now, once cornered by their faster-maneuvering single-seaters, we should be compelled to run the gauntlet, not once, but several times. While they are about us we need not fear bombardment from field guns. Only their airplane machine guns had to be avoided.

Now mounted on their tractor machines to fire over the propeller these were much more dangerous than formerly.

I looked back. Four of them were sailing over and ahead of us. One was darting straight at us!

Shutting off the engine, I pointed our machine steeply down. Curving first to the right, then to the left, I watched their maneuvers. Here come two of

them for their first shot, while the others are cutting off our front and both sides. I dip down and swing up into a quick loop just as the two dart under us. We didn't even hear a shot.

The others are waiting for us, however. I sheer back to the north again to get more falling speed. Again they rush, again I loop. This time one of them puts some of his bullets into us. I feel the shock of impact, but have no time to investigate the damage done.

Thanks be! Here come our fellows — four of them. And there are arising from the ground in two directions more enemy airplanes. With all this looping and diving I have brought my machine down to three thousand feet.

I head around to meet our flying squadron. As we labor along a Fokker flashes into us from the side. He pours in a stream of lead which almost swerves the control out of my hands. In the distance two more of our Nieuports are coming to our rescue. That makes six! The enemy have at least fifteen! We must make a running fight of it and be edging along towards home with due circumspection.

They will get one more chance at us before our succor can arrive. The circle is closed about us. Here comes a Hun up at us from below. I wheel

over at him and open my throttle. Philippe takes the control from me and squints along his gun sights. A quick barking of our machine gun, and we pass over him just as a wide gush of flame issues from beneath his seat. We have punctured his fuel tank with one of our bullets and the explosion has ignited his essence. Already he is ablaze from stem to stern.

At the same instant a spasm of pain shot through me. I was conscious of a rush of air over us. One of their planes had dived down into us from the left. The spar at my left side was shot through and yawed an inch or two away from the body of the airplane. Leaning over as far as my safety belt would permit, I clutched it with both hands and swung my weight upon it, preventing it from lifting and buckling up the top plane. I removed my feet from the control bar and saw Philippe look around hastily and stare at me. I had been hit through the neck.

Grimly I held on to my spar. Two more planes were falling ahead of us, but whether friends or enemies I could not guess. Like twinkling leaves scurrying before the wind, the darting, swooping airplanes swept around us. Our machine was so crippled that we could feel her swaying unsteadily in the draught of air. From every point in the heavens more airplanes were coming. This was the first real chance

we had had to fight out a battle royal in the air. The Boches had always broken and run. They must always have us two to one, or they will not fight.

Now we were out of it — now they were about us again. I saw Ned Yale and his observer flit past us, going to protect our escape, although they had no business to do so. I could feel something warm running down inside my heavy clothing.

Philippe looked over the wire supports carefully while the battle raged around us. He was flying straight for our camp, and our engine still sounded true. More of our French red, white, and blue marked airplanes were coming. Thousands of white faces below were staring up at the amazing struggle in the air. Three or four different duels were in progress at the same time. Like angry sea-gulls, they darted down at their prey. Firing as they approached, swooping at the ultimate moment over or under the enemy plane, they glided away for another spiral climb, another stalking for position, another sudden dive.

Incredible stunts were performed by the reckless pilots. Attempts to break the rudder by dragging the landing wheels across the enemy's tail were foiled by a skillful flip to the tail, lowering it in the last instant. Pistols were emptied into each other's faces

at ten yards' distance. Tail sliding, diving, side slipping, looping the loop, and flat banking were resorted to in the general mêlée. Here and there a stealthy approach from above and behind brought an unwary pilot into machine-gun range and bullets tore through the upper plane into the pilot's seat. A moment's flutter of the uncontrolled airplane, and she yawed this way and that as she swooped to the ground.

Some, with ammunition exhausted, glided down to safety. Others were pursuing each other far up into the fleecy clouds.

As we drew away from the midst of the fray and realized that our path was open before us, I looked ahead, and found we were almost above our trenches. My strength was gradually slipping from me. The cold rush of air hit my face continuously as I lay leaning out beyond my windshield.

But that did not succeed in keeping me awake. I recovered consciousness to find Brownie, Jean, and the Lieutenant lifting me tenderly out of my seat. The left wing I had been holding had given way entirely when we struck the ground. They placed me in the ambulance cot, and there I went to sleep again. That night when I awoke I found Philippe and Old Eli by my bed.

I tried to speak, but found my throat too swollen

and stiff. I could only look and make gestures with my fingers. After a few efforts, Philippe comprehended me.

“Seven of the boys have not come back — yet,” he said sorrowfully. “We brought down nine of the Huns that we know of; and their artillery advance that they were trying to conceal will never get across that bridge. We went back with some bombs and attended to that. Go to sleep now, Arnold. You will be moved to the Paris hospital to-morrow.”

CHAPTER XIV

THE BRIDGE ON THE OISE

MY mechanical mechanic Jean wakes me in grim earnest when he is in charge of that heavy duty. Seven other American aviators sleep beside me and around me in this palatial reception room, but never by any possibility does Jean shake the wrong shoulder, although I have often described to him, while scowling at my wrist-watch in the dark, the ineffable joy any one of them would feel at being roused out resolutely, then permitted to realize it wasn't necessary to get up.

Jean tells me M'sieu le Colonel has sent for me; and my Nieuport biplane is now rolled out on the lawn in front of the shed. I morosely regard my wet boots under the chair and wonder stupidly if I can get into them. Jean has lighted the candle, and its yellow glare throws a thousand lights in to the glistening chandelier overhead. An old ruined château is now our escadrille quarters. The windows are gone, and war's ruin is everywhere, but enough walls and

roof remain to provide us shelter and comfort celestial.

It is four-thirty on a May morning. I suspect it is May, for trees are greening up. Jean's watchful eye covers my movements while I engage with the sodden, soggy boots. Soon he is aware that I am fully awake and mean to get the business over with.

"Your coffee will be ready, M'sieu," says he, picking his way through the sleeping cots. "Right," says I, strapping on my Sam Brown and looking for my flying-helmet. "Good scout, Jean."

Colonel Demain and Captain Pieron are pacing the flagstones as I emerge from breakfast. The first signs of dawn are in the skies. It promises to be a fine day.

Both officers pause and return my salute. "Cigarette, Lieutenant?" asks the Colonel, extending his long gold-banded case. I take one and tap it on my thumb-nail while the Captain is fumbling for his tinder-light.

A month's rest in the hospital had done wonders for me, for I was getting pretty well fed up with excitement and really needed a change. My wound amounted to nothing at all beyond troubling me when eating all the dainty things my adoring aunt sent me. I could read and write as much as I liked, and

in fact, after a couple of days in bed, I got about in my bathrobe and was as good as new.

Philippe himself brought me my commission as lieutenant, and upon my return to duty, both Philippe and myself stood in line before an entire brigade and received upon our proud breasts the beautiful Croix de Guerre of France, placed there by the kind hands of our commanding General himself.

It seemed that our blundering fight so deep into the Boches' territory was considered quite a feat. Philippe had received his advancement in my absence, and upon my return I found, to my great joy, he was now Captain Philippe Pieron. My commission as lieutenant had been given me for the same exploit, but largely because I had been wounded.

"Old son," said Philippe, replacing his lighter in his breeches pocket, "do you know that sharp curve of the La Fère Railway where it strikes the river?"

"At the end of the long down grade from the Boches' supply camp by Velantie — I know," I replied, wondering what "solo" work could be done there.

"Yes, it's fifty miles from here. The Germans are evacuating Velantie this morning at daybreak. Their retreat will be carefully guarded, and you've

got to get through a hundred of their scouts. The Colonel wants that railway cut at the bridge."

So I was to carry bombs again! I had long ago graduated from this "stunt" class. And why should I be sent in my light, fast Nieuport? One never carries bombs in her.

Like a flash it came to me. The sky from the "ceiling" down would be full of German aircraft, covering their retreat. Unusual strength would be centered to prevent our bombing the railway if by any possibility we should suspect such evacuation. How did we hear of it, anyway? Spies, probably. And so, instead of sending over a squadron of bombers in their slow machines, they had picked me to go alone. And instead of circling high up over the field-gun range, I was to skim along at low levels, trusting to speed alone to thwart their aim and to escape pursuit. I began to burn with the thrill of it.

Colonel Demain squeezed my arm as we crossed the lawn. "I had the painters touch up your wings," he said. I should think he had. In the pale light I could see a dusky blending of wavy green and brown, melting the color, shape, and contour of the planes and fuselage of my gleaming machine. The gleam was all out of it. Top and bottom were splendidly "roughed" into an inconspicuous and very

serviceable color. At a low level the airplane would blend neatly with the mountains and verdure in the background. Even the squadron red, white, and blue circles were painted out. It was a nondescript independent.

Brownie was crouching under the pilot's seat as we came up to my beautiful Nieuport. Brownie is a stoggy little runt, always grimy and grinning. He had been wished on me when I was a young sergeant because of his stupid face. I soon discovered that he was the cleverest mechanic in the squadron. His final touch after overhauling and inspecting my plane was assurance to me that it was in absolute perfect condition.

Underneath the fuselage were hanging two reasonably heavy torpedoes. Brownie was adjusting the releasing triggers and satisfying himself about the fusing device.

"Arnold," said Colonel Demain, gravely, "I need not tell you we appreciate the risks of this expedition. You have been selected because of your bomb-dropping expertness and your familiarity with this region. Return home by way of Chauny. The Fourth Squadron will be up to protect you there."

I bowed my thanks and climbed into my seat. "Luck, old boy!" said Phil, squeezing my hand.

"Spark off!" shouted Jean, grasping the propeller.

"Spark off!" I answered, as I wiggled my controls and looked over my instruments.

"Spark on?" yelled Jean.

"Contact!" I nodded, and the propeller began to spin. I opened the throttle wide. The engine roared firm and true. "No wind blowing at all," called Captain Pieron into my ear, pointing at the drooping pennants on the roof.

Pulling my goggles over my eyes and throwing my safety-belt on to the ground, I motioned to the boys to pull away the blocks from the front of the wheels. The safety-belt weighs a pound or two, and every ounce might count on this trip. Moreover, I intended flying close to the ground, and where there is any possibility of a sudden landing you don't want to be strapped in your seat to be rolled over and over in your machine.

A quick throbbing of elation seized me as I sped over the grass. I laughed to myself at the thought of darting straight into the surprised faces of the whole German army and disappearing beyond them before they could aim a gun in my direction. I had long wanted to try this experiment. Flying at a height of about one hundred feet, just enough to clear

comfortably the tops of trees, buildings, and telephone-wires, my machine could be heard coming, but could not be seen until very close at hand. Their first impulse, I fancied, will be to look well up into the sky. Next, when they do see me, they will have no idea as to whether I am friend or enemy. My invisible coloring and the half-light of early dawn will require exceedingly close scrutiny to identify me.

I am traveling across the landscape at the rate of one hundred and thirty-five miles an hour! I had often reduced that to feet, and knew it meant I was going a distance of about *two hundred feet each second*. Why, I would be past them before they could raise a hand. Once beyond them, they would not dare to fire long for fear of hitting their own men. As for artillery or machine guns, they could not have time to aim them at all.

I sat well huddled down, my legs stretched out forward to the foot control, my face thrust into the wind-shield. The fuel tank was under my seat. A thin slab of armor plate protected it from rifle-fire. A shot can go through the machine anywhere else without causing much damage. They've got to get *me* if they get anything, I thought excitedly to myself. For fifteen miles I shall fly northward over

our territory, then I shall cross the trenches, and the adventure will be on.

Our trenches protected our front opposite the village of Vissy, which was still in possession of the enemy. I determined to fly directly over this town to gain the small degree of shelter afforded by its buildings, then, missing their aerodrome to the left of the town, head sharply to the east, thus beguiling them to telephone my approach in that direction. Once in the shelter of the wooded hills beyond Courbey, I could regain my path to the north with little risk of discovery.

It is yet dark enough to distinguish flashes of firing among the trenches. I must chance the fire from our own riflemen. It is also light enough to distinguish two or three observation balloons going up to the end of their tether. Those are German. Their airplane scouts are therefore already up guarding them. The ruined village of Vissy appears ahead of me. Now I am in for it!

With one glance down at the startled upturned faces of the men in our trenches, I dip down slightly from my five-hundred-foot elevation and rush with terrific velocity at the tops of the houses ahead. About the size of a checkerboard, with regular criss-cross streets, half of them piled with ruins, I notice

scarce a dozen human beings who emerge into full view. Not a shot has been fired at me, so far as I know. No sounds from below can reach my ears through the roaring of my powerful engine.

Instead of wasting time to think of shots, I glance ahead and above to see if enemy aircraft are about. None are in sight. Over the middle of the town I sheer three quarters to the right and lay my course above a line of poplar trees bordering the highway to the east. Not enough trees remain to shelter an enemy, but even these shattered limbs afford some obstacles to a bullet. I cross two more lines of trenches, but confine my attention to searching the air for hostile pursuers.

At no other time in the day is the air so smooth and so free from bumps as the early dawn. When the sun begins to heat the ground and currents of wind arise, eddies are occasionally encountered, which bump one about considerably. Passing through these eddies the airplane lurches and tosses, striking the firm air again with a resounding slap on the bottom of the taut fabric, not unlike the sound of a wave on the side of a canoe. Flying at a low level is then dangerous, for one may be brought to earth before control of the craft is regained.

This morning the air was ideal; with little or no

wind blowing, my indicator pointed to one hundred and thirty miles an hour. I had covered about twenty-two miles in ten minutes!

Over a dip of hills ahead I knew was located a German aerodrome. With several of these airmen I had almost a speaking acquaintance, for we had shot at each other on numerous occasions at very close quarters. If they were getting aloft, and they were certain to be, here would be my first danger of pursuit.

I sheer off to the right a bit more so as to deceive them the more as to my destination. Suddenly I am over their flying field. I distinctly see the groups of upturned faces about several machines, endeavoring to locate my humming motor. Several of their own motors are barking, and three or four airplanes are actually in the air. Without a sign of recognition, I duck my head and fly directly over their biggest hangar. Looking back a minute later, I see a frantic scrambling about the machines. Two at least of those in the air are headed after me. Veering slightly more to the right to draw their attention, I enter a shallow valley heavily wooded. Two miles beyond I cut sharply to the left and top the slope, flying close to the trees. My ruse has evidently been successful. Not a plane is in sight.

Now I begin to notice signs of the intending departure of the Huns. The sun is up and smoke is permitted to rise from many cook-stoves. Armored motor cars, artillery detachments, regiments of infantry, are busily engaged in their preparations.

Occasionally I see a rifle fired at my disappearing back, but I readily forgive these spasmodic impulses. Probably most of them would wager I am in fact a German scout carrying dispatches — else I would not be flying so conspicuously within reach.

I pass farms, villages, streams, and camps. Groups of enemy aerodromes are about me, and many of their planes are circling in the air. Once having passed the frontier, I am less liable to suspicion, although, undoubtedly, information of my passing has been telephoned about. Of the airplanes above me I have little fear. The noise of their motors drowns the sound of mine, and I am practically invisible to them, blending into the colors of the ground as I do. Airplanes on the ground have no chance of getting started in time to overtake me. Only an unlucky meeting with a faster plane at my own level will give me cause for alarm.

I am still headed many degrees away from my objective. I know of a deep valley farther on which will lead me, under good cover, back to the railway

along the River Oise. In the meantime I must divert the suspicion of the argus-eyed commanding officers who may be clever enough to conclude I am an enemy.

Devastations, deliberate and dastardly, are still going on below me. Trees are leveled, roads destroyed, buildings burned, and bridges blown up throughout the length of this soon-to-be-evacuated territory. Dummy guns are mounted upon dummy emplacements. Trenches are dug and mined for the annihilation of the pursuers. I photograph many of these positions from my unusual low level and pray that I may survive to deliver this information to Captain Phil.

From the drifting smoke below I see that a breeze is springing up. I cross several impromptu railways and observe freight cars loaded with artillery, horses, and troops. They all lead to and converge into the main line to St. Quentin. Undoubtedly they have been steadily moving all night, moving back to the new line in front of St. Quentin — Ribemont.

My plans for accomplishing my errand were simple enough. I must cross the Oise above the bridge and embankment, then head back toward home, flying directly along the railway track. When over the long bridge at the end of the curve, I shall drop

down to fifty feet and let go both of my high explosives at once.

I am across the valley and entering a noble canyon. Ten miles more and I shall see the river. Practically safe from airplane attack at this distance in the enemy's country, I climb higher to get a view over the adjoining ridges.

Few farms or cultivated plots mark the landscape. Almost unbroken forests cover these rough hills. At one thousand feet I see the tortuous windings of the Oise ahead. The railway follows its right bank. My heart is beating fast as I survey the objective of my flight. The difficulties of safely returning home through the increasing danger of daylight and an aroused watchfulness of the enemy are troubling me. There are important photographs to preserve and develop, rolled up inside my automatic camera.

To relieve my mind, I study the instruments on the dashboard. The clock points at five-forty. I have made a wide detour, indeed, to use up so much time. Every twenty minutes a German supply train is chugging over that bridge, carrying soldiers and munitions to safety. The speed indicator shows one hundred and thirty miles an hour. But I am in a following wind of at least ten miles an hour velocity, to judge from the smoke below, so I am moving over

the land at a total speed of one hundred and forty miles an hour. My altimeter indicates one thousand five hundred feet elevation. I nose her down a trifle. Petrol tank two thirds full, oil feeding regularly, plenty of spark, propeller revolution one thousand, four hundred a minute.

Still flying high, I debouch from the canyon and search the heavens for enemy patrols. They are there!

Up and down the river at various altitudes they glisten as they swoop. Banking stiffly, I shoot down towards the muddy current. Against that background I cannot be distinguished from above. Sentinies are gazing at me from the railway track, but make no efforts to hinder me. Coming from the north, I am assumed to be friendly, as long as I behave myself. The varlets wave with their helmets to me as I fly past.

My maneuver has apparently escaped observation from the Fokker patrols above. Four miles to go, and my objective is won. After lightening my load by releasing my bombs, I'll defy anything to overtake me. The trouble is I must climb high to avoid the shrapnel fire near the front, and these fellows are already high.

More patrolling foot soldiers are ahead between

the shining rails. I have no business down so low, they think, and they are leveling their rifles. "Whit!"—a bullet splinters the edge of a forward strut. Pretty good that, for a Boche. The alarm is given along the line; there goes a machine-gun battery leaping to their places! The bridge is just ahead. A long jolting train of freight cars drawn by two engines is almost upon it. When the freight cars cover the bridge, it will be protected against my bombs; and I cannot wait around here sightseeing until the train passes.

Swerving from the river, I dive headlong at the machine-gun emplacement. Several of the gunners leap to one side in terror as the roaring airplane points directly at them.

Responding to the slightest touch, the sensitive plane flattens out her course and clears their heads by a few feet.

Regardless now of their gun-fire, I push over the lever that arms the bombs and grasp the releasing trigger with my left hand. Gazing ahead at the approaching train, I measure the distance that separates us. I must get there first! The last seconds of this agonizing suspense seem an eternity. The exact spot where the bombs must strike the center of the bridge burns itself into my brain. Instinc-

tively I know how far this side that spot the trigger must be pulled.

The scared face of the engineer leaning from the forward engine cab confesses his knowledge of his doom. He is emptying his revolver at me desperately and wildly.

Pulling back with both hands, I feel the weight leave me as the airplane leaps into the air. The Nieuport plunges into the column of smoke over the fuming smoke-stacks.

The second bomb must have struck the forward part of the engine, for pieces of flying iron pass me simultaneously with the explosion. The concussion causes a few moments' trouble steadying my machine.

With a buoyancy that travels faster through the air than any man-made machine may outrun, the sudden expansion caught me and hurled me violently upwards through a stupendous vacuum. The next instant the stanch little Nieuport met the reverse blast of wind as the air poured in from all sides to fill the vacuum. Easing her off to lessen the strain, she gradually was brought back under control.

Looking back finally, I see the long train shoving steadily ahead, and dropping, car by car, into the muddy waters of the Oise.

"Arnold Adair," said Captain Philippe, as we



Dropping, Car by Car, into the Muddy Waters of the Oise
Page 206

were inspecting and labeling the proofs after lunch, "you ought to be court-martialed. Brownie tells me you came in this morning with less than a teaspoonful of petrol. Where did you go joy-riding when you left the bridge?"

"Well, that's another story, Mon Capitain," said I, secretly bursting with the desire to be pumped. "Come along while I break Brownie's head, and I will spin it to you."

CHAPTER XV.

A ZEPPELIN RAID OVER PARIS

“**J**UST consider a Zeppelin,” said Captain Philippe Pieron to his corps of aviators, “as a long cigar. She is cut into twenty compartments of equal size, and in each compartment is carried an egg-shaped balloon of hydrogen gas.

“If you puncture half a dozen of them, the rest will keep the ship afloat. The wrapper of your cigar covers the whole framework, protecting the interior and offering a smooth, sleek surface to the winds. Underneath this wrapper is a space filled with a non-inflammable gas that will actually extinguish a flaming bullet. The framework and compartment walls are of melanite — a metal lighter than aluminum, and elastic. A piece of this framework large enough to cover my sleeping cot yonder will weigh less than nine pounds, including the thousand rivets that hold it together.

“Now, remember that hydrogen gas is sixteen times as light as air. If you release it, the gas will go up to about thirty thousand feet above the earth,

where the air is just as light as the gas. But the gasbags and the framework and the engines and the tanks and all the other necessary parts of the modern airship comprise such a weight that an empty Zeppelin will not rise more than fifteen thousand feet. Now add to this weight the necessary men, then food, guns and ammunition, bombs, and fuel for the engines, and she cannot rise above approximately twelve thousand feet. At that level she displaces a volume of air equal to her own weight, so there she floats whether her propellers are in motion or idle. The weight of her load is estimated beforehand. She may carry so much and no more, depending upon the height she considers it necessary to attain. If she wants to come down, she pumps air in. Going up, she pumps air out.

“She does not let her gas escape as the ordinary balloon does. The Germans pump it into compressed gas-tanks which let it rush back into the balloonets as desired. Now, here is the point of this lecture — by quickly substituting gas for air in her front compartments, she turns her nose up, and her buoyancy plus her engine-power make her leap upwards much faster than any airplane can follow. So you’ve got to be on the lookout for that, or she will get out of your reach.”

"Why not get underneath and shoot up at her?" demanded Ned Yale.

"Because gas escapes up, not down," replied our instructor. "You must puncture her bags from above. Moreover, her gunners are apt to get you with their machine guns from the gondolas underneath her keel. They fear to shoot from the top platform, as the upward escaping gas might ignite from the flash of the gun and blow up the whole ship."

We were in a hurried conference in the corps commander's office. Our ten airplanes were standing, wing and wing, on the flying field in front of the hangar. The mechanics were trying out the engines, filling the tanks, and examining every spar, strut, and wire. Helpers were oiling the mechanism of the machine guns and fastening loaded magazines in the racks.

Half an hour before, while we were playing bridge, sewing on buttons, writing letters, or ragging one another on our personal appearance and character, the telephone rang. The orderly answered the call and, in the sudden dead silence, called, "Colonel De-main, the telephone, sir."

The tense pause while our commanding officer stalks across the room stiffens every muscle in our

bodies. Nobody breathes. Every brain is active, and each pilot's imagination runs swiftly over the list of possibilities. The still, sultry afternoon had irritated our nerves. Here was a call to action!

"Yes, that you, Paul? Yes. What! Well rather. Two of them, Right. Good-by."

The Colonel dropped the telephone and turned to his orderly. "Call up the airdrome. Have all the Nieuports run out on the field and put in shape. Get the lights ready for night flying. Send the search-light squads to their posts. Bring Captain Pieron to me."

"Zeps are coming, boys," said the commanding officer, turning to us with a smile. "The Twenty-first Corps spotted two of them just now, lying off Stevoy, waiting for darkness. Weather conditions are ideal for them. You will get a taste of night flying at last."

Belts are hitched up another notch, and, with a common inclination, we pass out of quarters down the lane to the flying field. The Lancer walks with me.

"And how many Zeps have you brought down, Lancer?" calls out Old Eli from the rear. My companion grins amicably. He has been flying since the first month of the war and is the veteran of our

corps. Severely wounded by a slicing cut across the forehead, he had been invalided to England several months ago and had but recently returned to his command. Simultaneously with his welcome appearance had come a communication from the medical officer addressed to the captain of our corps, as follows:

Lieutenant Arrowdale of your Flying Corps is discharged from the hospital to-day. The fair young visitors have fed him up with flowers and questions until he has developed into the biggest liar in the French army. This one sample will indicate the callousness of his soul.

Fair Young Visitor (leaning over cot). And how many Zeppelins did you bring down?

Fed-up Arrowdale (bored). Oh, I don't know exactly, I'm sure.

Fair Young Visitor (ecstatically). Oh, do tell me!

Fed-up Arrowdale (with agitation). Well, miss, the last time I came down the General come up to me and said: "Give me your lance, Arrowdale, my boy, you've got three of 'em stuck on there."

Needless to say, Arrowdale was dubbed "The Lancer" on the spot.

We reached the hangar and were directly joined by Captain Pieron. Drawing us into his office, he closed the door, and we seated ourselves along the benches and on his tables and chairs.

"Boys, it is eight o'clock. It will be dark in half an hour. Does every one of you know how to read the color light signals at the corners of the field?"

He glances at each one of us in turn. Each nods. Landing in the dark is no job for a novice. Our fast Nieuports travel at the rate of one hundred and thirty miles an hour. One hits the ground at a speed of considerably over a mile a minute. Even under the best conditions it requires coolness and judgment to make a good landing. A smooth field and plenty of room are absolutely essential.

At night the center of our flying field is indicated by a searchlight, surrounded by a circle of white lights. The searchlight points straight up into the heavens and winks at regular intervals. The four corners of the field are marked by a combination of colored lights, so that, once certain of the boundary lines and the corners, one could estimate fairly well his position above the field.

Our home field light winks three times, then shines steadily a moment. Others of our flying fields have other signals. Unless one strays too far away into the night, he can pick up his home signal with little difficulty.

After half an hour's pithy instructions as to our

method of attack and the Zeppelin's means of defense, Philippe dismissed us, directing each pilot to a certain position in the fan-shaped line of airplane sentries. Coöperation with other flying corps along our front, we should form a continuous line of protection between Paris and the German trenches.

"Lieutenant Adair will remain," the Captain added, as we started to leave the room. "Keep your positions at about eight thousand feet elevation. The Zeps will not be above four thousand until they are attacked. Then they will come up to you."

"Arnold," said Philippe to me, when the others had gone, "I am going with you to-night. We have a new one-pounder gun mounted on a Farman machine which we will try. I will be with you in five minutes."

At thirty seconds' intervals our machines were taking the air. One after another each pilot raised and lowered his ailerons and elevators, fanned the rudder, hooked on the safety-belt, and shot his arm up over his head. The helpers jerked away the blocks. The proud conqueror of the air rushed over the ground lifting up its shapely tail like a haughty peacock as it left the grass and soared into space.

Darkness was beginning to fall. The Zeppelin is a skulking monster which waits for the blackness of

night before venturing out. Released from its anchorage, it rises to the desired level over its hidden nest and stealthily approaches its victim. Its engines muffled to the quietness of the modern automobile engine, it permits no sound to escape save the buzzing of its propellers. Drifting high over places of danger with a following wind, the propellers are stopped, and the Corsair floats over in absolute silence.

Back of our front our searchlights are active. Unusually heavy artillery fire has been directed at our searchlight stations along here by the Germans, but it only serves to redouble our curiosity as to its purpose. Great white shafts of light cut through the night and extinguish the stars above. Flares, exploding rockets, and star-shells keep the heavens constantly agleam.

Philippe sits ahead of me, straining his eyes through a night-glass. We have a ponderous machine, which seems gigantic and lumbering compared to the flitting lightness of my dainty Nieuport. Lashed to her prow and pointing dead ahead looms the black outline of the new one-pounder. One must aim the airplane to aim the gun, for the gun is immovable. It shoots fifty shots per minute. Each one-pound shell explodes upon impact and breaks into a score of flying fragments which should rend

to pieces the fragile structure of any airship. The telescope sights are big and luminous. They are fixed along the edge of the cowl in front of Philippe, and the gun is lined up to fit them. Philippe has a dual control arranged in the machine, so that he can steer the frigate from the front seat as well as I from behind. It is a frigate indeed, for, besides the big gun weighing one hundred and twenty pounds, I have a rapid-fire gun of light weight mounted on the top plane, which fires over Philippe's head. We have each an automatic pistol and a small supply of fire bombs to be dropped by hand. Capable of making a maximum speed of only eighty miles an hour, loaded as we are, we have climbed to eight thousand feet in order to have the upper berth. It is freezing cold at this height, although the lower levels have a climate of late summer.

"It's a fake," called Philippe to me through the speaking-tube, after an hour's cruising through the night. "They're making too much of a fuss over there. It's a blind. The Zeps are not coming over this country. They will run west until they strike the forest along the Oise, then follow down the river to Paris."

He waved his hand to the west as he banked the machine over. In the distance the dense blackness

indicated an utter absence of artillery activity, and I began to follow Philippe's deductions.

The Zeppelins presumably would steer west by compass while well back of their own front. Picking up the Oise River, they would then follow its left bank, keeping above the heavy forests about Compiègne and Senlis, thus reducing the risk of discovery by our searchlights. Not until they reached the vicinity of Marly would they run the gauntlet of our anti-aircraft guns and searchlights.

That means a journey of two hundred miles for them after dark. They can make sixty-five miles an hour at a pinch. Better estimate it at fifty-five, as they are heavily loaded. That will make it after midnight before they reach Marly. Marly is twenty-five miles north of Paris. We have plenty of time.

We carry fuel enough for six hours' flight in this old bus. The light Nieuports will have to come down long before that. It is now ten o'clock. We will cover the distance to Marly within an hour.

We drop down considerably to get our bearings. Picking up the flying field three miles east of ours, and lining it up against our own flashing signal, we mark out a straight course for Senlis. Flying at night is somewhat like flying over the foggy sea in that no landmarks are certain by which to lay one's

course. Although one follows his compass, a beam wind blowing will take him sideways many miles out of his path. The light breeze from the north we had already noted. At the end of an hour's flight we calculated it would have drifted us south within sight of the signals marking Senlis.

As we droned along under the summer sky I had nothing to do save to avoid colliding with other planes and to keep an eye on my compass, speed-indicator, and altimeter. Philippe was again busy with his night-glass, and I would feel an occasional movement of the controls as he altered our course.

We were fully aware of our position relative to certain signal lights below. An occasional flare would light up the gleaming Oise flowing south along our left. Frequent sparks of lights sped under us. These were the tiny red lights on the tips of French airplanes' wings to warn their followers against the danger of collision. Our searchlights about Marly were continuously searching the heavens. Not a sound from outside reached our ears through the roaring of our engine.

Suddenly we noticed the white beams of light ahead of us cease their wandering and concentrate steadily to the westward. Instantly appeared unfolding wreaths of smoke and fog almost yellow in

color as the intense light penetrated and crossed these bursts of shrapnel. The enemy had been discovered!

A score of searchlights directed their pointing figures to the one common target. Twoscore airplanes gathered from the adjacent heavens around the silent monster below us. Sweeping in wide circles at eight thousand feet, we judged the Zep to be not more than three or four thousand feet above the earth. Eager to take a hand in this business myself, I pushed over my joy-stick a bit and nosed the machine down. Philippe quickly pulled her back again and waved his hand over his head for me to desist. Disappointed, but confident that my captain had some better plan in his mind, I surrendered the control to him and again watched the proceedings below.

The whole menagerie was moving steadily and swiftly southward. Zeppelins, searchlights, bursting shells, and darting airplanes were keeping pace together rod by rod. Our airplanes were above the enemy and circling wide to avoid the gunfire from our anti-aircraft batteries. Suddenly a signal light burst out from one of the airplanes, and the firing ceased. Simultaneously, like angry wasps, the flock of buzzing planes darted down upon their prey.

The forward motion of the airship slackened. We could see her in the beams of light quickly stand on

end, with her nose pointing upwards at a sharp angle. Almost at the instant our airplanes reached her she shot directly up and through them, rising with incredible swiftness. Rapid flashes of fire sparkled from our airplanes' guns, but the sudden upward jump of the huge monster had obviously disconcerted them. The searchlights lost her, wandered again in every direction, and finally picked her up again a mile east.

We ourselves had been unable to follow the maneuvers of the enemy craft from the moment she shot out of the encircling shafts of light. We had observed, however, a significant signal which might well have escaped the attention of both the volplaning pilots and the land forces below. The Zeppelin had let off a rocket which lit up the heavens in our vicinity with its floating blue balls of incandescent light. She was undoubtedly sending up a signal to her sister ship that now was the time to dive across this exposed area while we were all engaged on the present job.

But which way would the second Zep steer her course? Would she keep to the left or would she cross the river and be already well on her way around our other end? Obviously, she will not enter another sector where all the defenses are on the alert, but she will skirt the edge of this confusion at the op-

portune moment and work her way to the rear of our sector well behind our center. Then she will have safe going until she reaches the fortifications about Paris itself.

These reflections occupied me only an instant. The self-appreciation that came to me when I realized that Captain Pieron had arrived at the same conclusion occupied me the balance of the night. Phil had headed our slow-going bus directly away from the trenches and was shooting steeply down to a lower level.

On, on we flew. Several times I thought the encircling searchlights below were on the edge of Paris, but we passed them by without hesitation. At last, when we did begin a long sweep to the right, I could not believe we were over the city. The blackness below was not broken by a single spark of light.

We had beaten the enemy to her objective-point and must await the movements of the searchlight operators to indicate the exact place to strike. We had been picked up and followed by these alert operators most of our way in. Our signals satisfied them as to our identity and we were soon cruising about the aerial harbor of Paris, mingling our warning lights with those of countless other defenders. Ships that pass in the night! Truly, no equal mystery and

concern attach to the passing craft on the sea. Like restless fireflies skimming, the defending planes crossed and recrossed the threshold to Paris at every elevation from one thousand to fifteen thousand feet.

As it is of no use to strain one's eyes against the blackness of the midnight sky, the air-scout plies his craft in and out among his fellows with one eye out for collisions and the other eye following the movements of the searchlights below. As soon as anything hostile is discerned, the inquiring beams of light begin to approach it from every angle. Soon the enemy is in a focus of light which blinds its eyes and reveals its smallest movement to the sweeping scouts above.

Coming steadily along, we now beheld the sister ship, the cynosure of every focused light, accompanied by the usual spray of bursting shells; moving at her utmost speed, she was still baffling the range-finders and gunners of the French batteries below. The pursuing airplanes swung about her at a safe distance overhead. With marvelous agility, the big balloon dodged and dived her way across the danger-zone covered by our land guns. In the gondolas, swung close below the keel of the ship, we could see the German gunners standing by their pieces. On the backbone of the monster, amidships,

was the upper gun platform with a rapid-fire machine gun mounted on an anti-aircraft pedestal. At intervals, several of our circling battleplanes swooped down at the Zeppelin together, pouring in volleys from their small guns as they approached. As they passed under the Zeppelin, the airplanes ceased firing and braved the danger of the exploding shells as well as the German fire from the gondolas while they again climbed in spiral leaps to their upper berth.

Airplane rockets were fired upwards by some of our pilots, but none of them struck their target. Bomb after bomb was dropped from above, and they could be discerned bursting into flame as they struck the ground after grazing the sleek-sided enemy.

Philippe had been steadily pushing upwards since the appearance of the struggling intruder. Our slow-going machine was no climber. One chance at the enemy with our heavy gun was all we could expect. Once we had launched our attack and passed under the Huns, we should never have an opportunity to climb above them again. They were moving almost as fast as we were.

Again we were at eight thousand feet. Our darting airplanes below were annoying the raider so persistently that her crew had no time for selecting choice buildings of Paris for their bombs. Again

the Germans resorted to their ruse for shaking off the airplanes, and we saw her shooting up out of their midst.

“Quick, before the searchlights lose her!” shouted Philippe through his speaking-tube.

Banking steeply over to the right, I cut off the spark and swing back in a long spiral to the rear. Cutting off another switch, I extinguish our wing-tip lights. In the sudden silence of our deadened engine I can hear the continuous booming of the artillery and the constant explosion of shrapnel bursting around us. So thick is the drifting smoke that the powerful beams of light are dissipated and broken.

Oh, wretched luck! We have lost her! The Zeppelin is nowhere to be seen.

Somewhere hidden in those blinding clouds, our prey that we have so long been stalking is rising to meet us. But have we passed her? It will be pure luck if we ever see her again.

Cautiously I begin to flatten out our path again, when suddenly I shout aloud for joy. Ahead of us and below there darts a sweet clear light outside the pall of smoke. The star-shell bursts and floats away. Leveled out under the glare, the Zeppelin is pursuing her solitary way.

Captain Philippe waves both arms over his head

and I relinquish to him the control of the machine. Accumulating additional speed as we slide down upon our target, the Farman battleplane prepares for action. I draw out my automatic from my blouse and seize the lanyard string overhead. Philippe leans forward, sighting through the luminous telescope the black mass ahead.

Fifty yards away we both begin firing. The quick pom-pom of our heavy gun startles me. The unaccustomed recoil jars our machine. In the excitement of the moment I forget to release my lanyard and my light gun continues barking until the magazine is exhausted.

For a wonderful thing has happened! As we brush under the stern of the monster craft she suddenly vanishes with a roar that stuns me. Our machine is hurled like a feather, sideways, and down. Our terrific speed and the stanchness of our heavy planes saves us from the common disintegration. A red glare lights up the heavens and shoots thousands of feet into the stars. Acres of burning débris are floating and falling down around us. Down through the center of this field of flames a glowing mass of twisted metal is slipping, rotating as it increases its velocity. A million cubic feet of gas has exploded!

“Lieutenant Adair,” said Colonel Demain the next morning, eyeing me with his sternest air, “you are to report with Captain Pieron this afternoon to the War Department in Paris. The citizens of Paris do not like burning embers scattered over their houses at night, and I believe they have something to say to you about it.”

CHAPTER XVI

STRAFING JACK JOHNSON

“**L**IEUTENANT ADAIR,” says Colonel De-
main, coming out of his office to give us
orders for the day’s work, “you will report to Battery
Thirty-seven this morning for artillery services.
See to your wireless equipment and arrange your
signals with Captain Philbert. You have been to
his headquarters?”

“Yes, sir, I know his quarters — on the second
hill above Morey.”

“Quite right. You will have to land on the Morey
field and telephone for a car if none is waiting there.
Green will accompany you.”

I salute and hurry to the hangar. My mechanics
are already adjusting the wireless box in the front
seat of the Farman pusher. She is a slow-going bus,
capable of making only ninety miles an hour with my
weight alone, but she is a stanch, reliable machine for
reconnaissance work. A “spotter” has to fly at
rather low altitude to see clearly the exploding shells.
He is fairly well protected from machine-gun fire as

low as two thousand feet by light armor plate under his seat. The rest of the machine is non-resisting, and bullets puncture the fabric anywhere without seriously impairing her flying ability.

As I enter the hangar I see David busily engaged with his own machine. His mechanics are admirably watching him, their hands full of tools. The other members of our squadron are strolling down to the field to see us get away. They will soon follow in lighter scouting Nieuports to protect us from enemy raids.

I had been sent across the trenches before daylight this morning to carry one of our Swiss spies into the enemy's camp. Having attained the highest possible elevation over our lines before crossing No-Man's-Land, I shut off the engine, so that no attentive ear in the German camp would detect my approach, and glided quietly over the trenches and back some three miles into the enemy's lines. A wide circle brought us over the woodland, plainly marked under me by the silvery Aisne shining in the moonlight. Here I signaled my passenger to prepare to drop.

This dropping business is rather a delicate operation. The airplane is checked in speed by pointing her nose up vertically until she has lost practically all headway. The agile parachute jumper must

clamber out of his seat and cling with his hands to the edge of the cowl, with his body suspended in air. His parachute is fastened under his armpits and to his belt. The bulk of the parachute fabric is hanging down behind his shoulders, swinging clear of the body of the airplane. Fastened in front of his chest is the caged carrier pigeon, which must receive solicitous care in the descent and during the inevitable landing amid the trees.

The precise moment for letting go arrives as the machine begins to waver in the air. Then, the rush of wind ceasing to blow back his parachute into the propeller, it will quickly unfold and support his falling weight within a hundred and twenty or a hundred and thirty feet drop. The release of his weight coincides with the stalling of the airplane. The pilot has his hands full for a moment in righting his machine from the backward tail dive. The tail is gradually swung up until the airplane is again horizontal. Then, dipping her nose down, she is glided away as far as possible from the scene of operations before starting the engine and awakening the stilly night with the barking of the exhaust. From a height of two thousand feet the airplane will glide considerably over two miles before its approach to the ground compels restarting the motor.

At that distance from the parachute there is no more necessity for secrecy, and the pilot then turns on his roaring engine and makes his way back to camp.

In the meantime the spy has landed among trees or bushes, where the parachute is concealed or destroyed. In German uniform he proceeds with his dangerous reconnoitering with the speed that circumstances permit.

This morning at breakfast, only two hours after my return, the captain discovered the home-coming pigeon. Bound under her body a thin paper map was secured. Our informer had been successful in his quest, and now indicated with admirable precision the location of a concealed "Jack Johnson" that had been industriously battering our interior for days. So cleverly was the gun hidden that our most hazardous surveys from the air had given us absolutely no clue as to its location.

The huge battery was completely covered by a trellis-work of trees and branches. It had evidently been taken to its position during the night from the river. According to the map, it occupied a natural gulch in which the gun itself lay concealed only thirty feet from the river's edge. No road into this ravine was visible from the sky. A dozen of us who had been searching that region for a week could make an

affidavit to that. The Germans had floated their gun down from Neufchâtel during the night and had mounted it and covered it with trees and branches before day broke.

On "Queen's Knight's 4th," as Hoyle would have it, a tiny red cross was marked on our one-hundred-foot scale chessboard map, indicating the exact spot of the big gun's foundation. The north half of the river occupied most of the remainder of the square.

A code message at the bottom of the slip of paper informed us that our spy was so far undiscovered. He would meet the airplane at the time and place agreed upon for his return into our lines. And now we were to watch that "Q. K. 4th" and correct the range of our nearest battery until it demolished it.

"Come along, kid," I said to David; "I'll show you the way to Morey. Everything all right with my wireless?" I inquired of Brownie, my mechanic.

"Right as a rabbit," replied Brownie, grinning.

"Mind you get back for lunch, Arnold," said Lancer, walking out on to the field, his arm in mine; "and now, remember, when I double one no trumps you must always come back at them with a two bid in your best suit. You lost me a week's pay with your fool bidding last night."

"I don't bid what I haven't got," I replied, indignantly. "How about my week's pay you made me lose?"

"Well, do a good job with the Boches this morning and get home to your family. Time hangs heavy on my hands, old son."

Ten minutes later David and I had landed at Morey and were bumping over the rough mountain road in a flivver. A guard was in charge of our two wireless airplanes, and we were being taken to the Captain for our final instructions. His dugout lay within a hundred yards of his battery, and was connected with it by a spacious, well-kept communication trench. Elaborate pains were taken to conceal all evidences of occupation from airplane eyes above. Great trees had been transplanted and cleverly grouped about his 75's. Grass sod was luxuriantly growing over the top of his dugout and trenches. Not a path was permitted to be worn across any space visible from above.

A poilu sat on an empty box in the underground telephone station, his wireless receiving phones pressed to his ears. Far overhead, strung between the tops of two fir trees, was the aerial or antennæ, also carefully concealed from airplane observation.

Two batteries of two guns each were pointing their noses northward, anxiously sniffing the breeze to catch a scent of their target. Twenty or thirty men were standing at attention, and saluted as David and I were brought forward.

Military airmen enjoy a distinguished position in the modern army. Circumscribed by little or no discipline, they are the true free lances of twentieth-century warfare. Treated with deference and politeness by officers as well as by the men of the ranks, and relied upon to command their own movements without especial instructions, natural impulse might lead them to assume an improper self-appreciation and self-complacency. But such is not the case. Rare indeed is the necessity for official rebuke to an impudent or irresponsible air scout. Flirting constantly with death, and soberly proud of his peculiar usefulness, the airman avoids instinctively any cheapening of his distinction. Every day incredible deeds of heroism and valor are performed by the fliers which are never reported and never known. If medals and military crosses were consistently awarded, every airman would of necessity be almost daily decorated. His opportunities are always thick upon him. Embracing death is easy to the airman, compared to the pain of confessing a shameful act to

his fellows. That kind of torture eventually drives the remorseful pilot to deliberate suicide.

The story of one such episode is well known to the older members of our corps. One poor frightened lad who fled in terror and left a fellow-scout alone to fight his way clear of an overwhelming force returned headlong into the combat a few minutes later and hurled his machine deliberately into the nearest enemy airplane. Both machines fell together, their wings broken and both engines blazing with fierce flames. By common consent the enemy air fighters withdrew from the field — all knowing too well the cause of this terrible sacrifice. Impelled by that noble chivalry of the air service, they paid a last honest tribute to this atonement.

I saluted the double row of gunners as I passed them, vowing that I should merit their personal respect before the day's work was done.

"This is great good fortune, boys," cried the Captain with enthusiasm, as David and I entered his dugout. "Twenty minutes will do the job if we have any luck. Have you seen this little map? We will drop fifty shells, fifteen pounds each, into that bit of a hollow from each of our four babies here within one minute after you correct our range. That makes two hundred shells a minute — a ton and a half

of steel to the minute. How many minutes will it require to smear that German battery over the landscape once we have the range, boys? eh, what?" He laughed, rubbing his hands together eagerly.

"It's four miles and a quarter to the far bank of the river from this spot. How long will it take your airplane to get there?"

"Fifteen minutes will do to get our elevation and position," I replied. "But we will need another fifteen to get back from here to the Morey flying-field and get away, sir."

"Very good. It is now 6:10. We shall see you as you fly over us. At 6:40 we begin firing.

"Anthony," he called to the wireless operator, "we will use the clock code. And you," said the captain, turning to me, "send your messages on two minutes' changes. Begin on two hundred meters. At the end of two minutes tune your instrument up to three hundred meters, next four hundred, then five hundred. If the Germans succeed in jamming your messages, come back to four hundred, then three hundred, then two hundred. Do you follow me?"

David and I nodded. "Shall we report back to you, Captain?" I inquired.

"No, not unless something goes wrong," he replied. "You can signal us when we've done enough."

Running back to the road, David and I jumped into the vibrating car and were soon bouncing across the fields and back over the hills to Morey. Battery Thirty-seven lay behind a ridge, four or five hundred feet in height, thickly covered with brush and timber. Only one poor narrow wagon road approached it from Morey to where it lay hidden two miles back of our trenches. The guns fired blindly through the branches of the neighboring trees, over the intervening hills, across the invisible trenches and No-Man's-Land, and rained their fifteen-pound shells over a span of ground that could be calculated to a foot.

The distant target is imagined by the gunners to be the very center of a clock. If over-shooting is discovered, we signal back "Twelve o'clock, sixty yards," or whatever the distance is, indicating that the direction is correct, but the distance too great. The 75's are then altered sufficiently to bring back the falling missiles approximately sixty yards. If the bursting shells fall at ten o'clock or two o'clock, at eight o'clock or four o'clock, the correction is quickly made upon the receipt of this information.

The eastern gun at the right end of the battery is Number 1; the next is Number 2; then come Number 3 and Number 4. Salvos of five shots each are fired in this order, so that the airplane spotter can

identify the error of each particular gun and correct it by telegraphing: "Number 3 — six o'clock, one hundred yards," or "Number 1 — nine o'clock, thirty yards."

As we climb into our machines I caution David to keep watch of the shells from Number 1 and Number 2 only. If any accident puts me out of it, he is to report for all four of our guns. If enemy aircraft approach, we are to beat a retreat and not to attempt any parley with them.

We climb into our seats, snap on our safety-belts, and slip on our goggles. Moving the controls to see that all are working right, testing the wireless apparatus for the last time, examining the magazine of the machine gun, and placing the automatic pistol handily into my blouse pocket, I raise my arm up over my head, and the attentive helpers pull away the blocks. David follows immediately behind me. Seventy yards across the field I raise the elevators and the big machine slips off the ground and cuts into the wind.

At the end of two spirals over the little village of Morey my indicator points to six thousand feet. The clock on the dashboard says 6:30. I look around and see that David is at the same height, a short distance behind me. We have ten minutes to reach our

station over the Aisne. Two minutes are enough.

Circling around to the west, we pass over the trees under which the men of Battery Thirty-seven are watching us. Still climbing, we cross the trenches, pass above the swaying captive observation balloons, both French and German, note the disposition of the floating air patrols above us, and prudently leave on our left the anti-aircraft battery, for whose accuracy we have the utmost respect.

We follow the north bank of the Aisne and fly directly over the wooded hollow where lies concealed our unsuspecting target. It is a short, deep ravine surrounded with splendid forests, as yet unmutilated by war. The trees in the hollow so blend it with the adjoining hills that I am unable to distinguish from our elevation our exact bull's-eye. Thirty feet from the river can be nicely estimated, but we must drop to a lower level to pick up the outlines of the ravine.

I raise the lid from my wireless instrument over my right knee and unwind my spindle, which lets the four wires stream out behind the tail of my machine. Pulled steadily along by the rushing airplane, the counterpoise wires flatten out behind and whine through the air. Overhead along the top plane my antennæ wires are strung. Both sets of wires are connected with the instruments in the cockpit of the

airplane by insulated communication wires running through protected parts of the machine.

As the hands of the clock point to 6:40 I am headed back towards the river, looking through my glasses at the undulating landscape below. Promptly on the minute tiny puffs of smoke and dirt begin to play among the trees. "There goes one, and now two begins," I think to myself. Instantly a confusion of slashes in the waters of the Aisne indicates the under-aiming of our Number 2 gun. Over my receiver I heard David sending, "Two — eight o'clock, two hundred yards."

Number 3 follows, and likewise bombards the water fifty yards into five o'clock. After a fifteen-second pause Number 4 pours in her salvo, and in the wreckage that ensues I discover how flimsy is the covering of trees and branches that concealed the big gun of the Germans in the hollow. Our Number 4 has made a bull's-eye the first shot!

Sending in my report to correct Number 3, I cannot help adding, "Four exactly O. K.," though such compliment is uncalled for and not according to Hoyle.

Circling back, I alter the wave-length of my transmitter, in accordance with instructions. My receiver tells me the enemy wireless operators some-

where are already busily engaged in destroying our messages through their more powerful equipment. My overhead wires crackle and sparkle into my receiver, so that I can no longer hear David's radio messages.

I miss the order of salvos during the second round. The Germans are not only quick to respond with their wireless jamming, but their anti-aircraft batteries have been brought into action with uncommon celerity. I observe one burst of shrapnel directly in front of David's airplane that staggers him momentarily and causes him to slip sideways on his wing. He falls a few hundred feet, and, there recovering, beats his way back. Clearly it is time to change our level.

Our shells were still falling in the river. That must be either Number 2 or Number 3. As I dropped down, with my engine cut off, I saw from the thirty seconds' pause that Number 1 would be the next to fire. There they go! Still wild — bursting in the tree-tops at ten o'clock. Our wireless messages are hopelessly muddled up. David might be getting some through again, but results do not indicate it. Number 3 is over-shooting. Number 4 is again right on the target.

I retune my set and again try two hundred meters,

pounding out the correction to Number 3. Puffs of shrapnel begin to search me out on my present route, and I am undecided whether to go aloft again or to fly still lower down and try my luck. David is now high above me. Still higher sit a flock of our scouts guarding us.

The enemy guns are already replying vigorously to our '75's. Ten minutes have elapsed since our first shot announced that we had learned the position of their "Jack Johnson." As if by magic a score of enemy observation balloons suddenly nodded their heads above the trees as they reached the end of their tether rope.

The day is misty, and when I climb up to eight thousand feet I find I can see nothing of our exploding shells about the target. I circle over twice at this level in order to tempt the Huns to alter their range, then I cut off my engine and volplane down.

The "swish" of a speeding shell passes me so close that I can hear its whining above the rush of my own machine. Straight down at the hollow I dive. As I approach I see that a considerable portion of the river's bank has been dug up by our fifteen-pounders. Broken limbs and skeleton trees begin to mark the immediate vicinity of the hidden gun. For ten more minutes our gunners have been blindly fir-

ing, and I cannot get a single message through to them.

Again I catch Number 1's salvo as it opens the storm of shells. She is away off to the right, still strafing the hillside, one hundred and fifty yards past three o'clock. Number 2 is very good — just a trifle up towards twelve o'clock. Here begins my shift. Number 3 plants its five missiles in one-second intervals into the edge of the water at six o'clock. Number 4 is persistently dropping its shells on to the very platform of the big gun.

I get one message through to Number 3, then I find that the Germans have jammed me again. I hover about for another round. David has evidently pulled his Number 1 well on to the target. The others remain as they were.

Dodging, listening, lengthening and shortening my wave-length, I send in message after message to Number 3. Pieces of flying shrapnel puncture my planes and tail, and more than one strikes the streaming wires behind. A chaos of jamming radio sparks interrupt and drown out every message I send. I cannot hear David's feeble spark at all.

Making a wide detour to avoid our own shells, I circle back to Battery Thirty-seven, winding in my trailing wires as I go. Two of them have been

severed by shrapnel and are no longer of any use.

Removing my glove, I hastily write out the result of my last observations, fit the writing into a dart, and hold it ready for launching. Two long cloth streamers are tied to the top of the leaden dart. These catch the wind and hold the dart perpendicular. They are of bright colors, so as quickly to attract the eye. Gliding low over my battery, I drop my message. I see it strike the ground and a gunner runs to pick it up.

Back to the river I dash, climbing steadily. The ruined city of Rheims appears through the dissipated mists twenty miles to my right. Neufchâtel can be distinguished farther ahead, up the gleaming river.

David is still soaring high above the target. I volplane down from the left to get a clearer view of our "Jack Johnson."

Suddenly a tremendous upheaval of earth, trees, and water obliterates the hollow below and rises heavenward to meet me. One of our shells must have penetrated the German ammunition cellar and struck one or more of their huge explosives!

For a radius of fifty yards the landscape has disappeared into the air. As it settles gradually to earth again and permits me to see through the dust I observe that where once stood the gigantic gun that

had been bombarding both Rheims and Soissons from its crafty hiding-place the crater is now filled deep with the waters of the Aisne. Any German gunners who survived the explosion are certainly flooded out of their deep shell-proof vaults!

Our fifteen-pounders are still falling like big hail-stones, churning up the muddy waters into a chocolate foam.

David darts by me, cavorting and gamboling about in his big machine in an endeavor to illustrate his exultation. He swings around me to take a pot shot at the sausage balloons behind us, but I head him off and wave him in. He is immensely tickled at the strafing we are still giving the flooded gulch below, but, being a frugal soul myself, and mindful of the responsibility of a lieutenant in command, I pass low over our faithful gunners of Battery Thirty-seven as we are flying homeward and toss them a last message:

It is finished. Mister Johnson is knocked out.

LIEUT. ADAIR.

CHAPTER XVII

A BIT OF NIGHT WORK

AN astonishing series of accidents smote our corps to-day. Poor Montaigne, coming in before daylight from a bombing expedition, landed heavily in the middle of the poorly lighted field; instantly, upon impact with the ground, he and his airplane were blown into a thousand fragments. One of his powerful bombs had been left swinging under his machine. No doubt he thought that he had dropped them all, but one had failed to leave the rack. As his airplane struck the ground the bomb exploded under him.

That happened before daylight. I did not know about it until I returned from my morning's artillery spotting. I turned in for a little sleep after lunch, for I had been out most of the night before and had another little expedition scheduled for to-night. When I awoke, I strolled on down to the aerodrome. There I learned of two more accidents that had hit our squadron out of a clear sky!

When one returns safely day after day through the

hail-storm of bullets and bursting shells, one naturally feels somewhat chagrined to come a cropper like an ordinary recruit. To be done up by a well-aimed bullet is a legitimate death, and one thinks no more about it; but, to succumb to a mere accident of fortune, not only shakes the victim's confidence miserably, but it operates almost as disastrously on the morale of all his fellow-scouts.

All the afternoon the alluring flying weather had kept the air full of our droning planes. Nothing especial was on. Our boys finished their shift of "ceiling work" and came down to smoke a cigarette and fill up with petrol. Sheer love of flying tempting them aloft again, they swam about in the clouds, diving, looping, spinning, and banking like a frolic-ing school of porpoises. Banks of white clouds floated high in the sky. Languid summer air lulled the hot, anxious trench-fighters below. Only occasional sounds of artillery fire came across the still afternoon. Both mighty armies lay down their arms, relaxed temporarily, and mopped their brows.

In the midst of this unnatural calm things suddenly began to happen — unexpected, unnecessary, crazy things. Old Eli, one of our most cautious fliers, rose from the field and crashed into the wireless

radio antennæ, smashing his machine and escaping death by just a tiny margin.

Half an hour later, less than two miles distant, one of our scouts, trying out a tricky little Morane Parasol, struck the one and only church steeple left by the Huns in thirty miles. Breaking off the right wing, the machine pitched violently on to the roof, slid over the edge, and crashed to the ground. Montgomery had the wit to free himself from the safety-belt, so he was thrown far from his wreck and suffered only a few broken bones instead of crushing all of them under the heavy engine.

David Green had been sitting aloft in his graceful Nieuport all this time, lazily sailing back and forth on the crest of the white sea of clouds, sixteen thousand feet above earth.

Venturing down into this fluffy mass is a mysterious and fearful adventure. A dizzy sea of drifting white mist envelopes one so thickly that even the rudder of one's machine is lost in the milky distance. Strange tricks are played with one's senses. Gravity does not pull down as it should. One finds the earth in an entirely unexpected quarter when he emerges from the cloud bank.

Absolutely blinded by this impenetrable mist and deafened by the noise of his engine exhaust, David

plunged and rolled his airplane in the swirling clouds merely for the excitement of losing his sense of direction. Spiraling up through the center of the same cloud bank came De Mercey, in his light, swift-climbing Nieuport. With the whole expanse of the heavens yawning before them, their unlucky stars led them into the selfsame path through this opaque cloud bank. Almost without realizing he had collided with another airplane, David suddenly smashed side-wise into something that disappeared instantly, sending him gyrating wildly through the clinging wreaths of cloud.

Keeping his wits about him, the kid steadied his machine by all the known arts of aircraft, but he soon discovered that his airplane was utterly beyond control. He cut off his engine and experimented with his controls as he tumbled madly through the confusing atmosphere. Suddenly he emerged out of cloud-land into open air and discovered to his astonishment that the ground was in quite the contrary direction from where he supposed it.

Again he delicately manipulated his joystick, and, to his great relief, found the crippled airplane would now glide against the pull of gravity, although her gait was erratic and tremendous.

Just here out of the cloud bank swung the other

Nieuport. With one wing hanging broken, she was swooping sidewise and down in yawing swings. The frightened face of the doomed De Mercey looked across into David's for an instant, then disappeared forever into the German lines.

David succeeded in making his landing by pancaking in a plowed field some ten miles from our camp. He was uninjured himself, but his Nieuport was a total wreck. The accident to a fellow-pilot, of which David had been the not-altogether innocent cause, completely unnerved the boy. He came staggering into camp just as we were getting up from supper.

We had been talking over the unusual run of bad luck when David's heartbroken story was added to the melancholy list. David had spent the first part of the forenoon with me in artillery spotting and had made a reputation for himself both by his accuracy of observation and his skillful wireless operation. Now he loathed himself, and could not bear to be comforted. We saw him finally drop to sleep, and so left him, with the Captain's orderly to look after him. I had myself slept all afternoon to get in shape for a nasty bit of night work.

Last night I took one of our Swiss spies into the German lines and dropped him, with his parachute, into the woods along the Aisne. Now there remained

the very unpleasant little duty of getting our spy back. It is one thing to drop down into the woods at night under a parachute and quite another thing to jump back out of those woods the next night up to the airplane. It is a rule that will not work both ways.

Frequently the spy is captured and a trap laid for the ensnaring of the airman when he returns for his passenger. I do not like to think of the fate awaiting a pilot so entrapped. Legally, he is in the same position as the spy himself, for he is an accomplice and is caught in the act of aiding the spy to escape.

Every precaution is taken both by the spy and by the airscout. An exact meeting-place is arranged for at an exact time. This meeting-place must be on a suitable open field where landing of the airplane is possible and a safe get-away is probable. Not only is such a spot difficult to select within the enemy's lines, but, once agreed upon, the utmost resources of the pilot are required to find the spot in the darkness, to satisfy himself it is still reasonably safe to land there, and finally to make his descent and landing in the darkness without a smash-up.

In nine cases out of ten, I suppose, pilots select an enemy flying field for this rendezvous. Not only are all suitable fields near the front occupied by flying

corps, but their landing lights are of inestimable benefit to us in making the perilous night landing. Bullet-holes from their machine guns can be survived, but a broken wing, which may be considered a condition usually accompanying a landing in absolute darkness, finishes one for certain.

Therefore a smooth and conveniently located airplane field within the enemy's lines is chosen, and a prearranged signal light is placed in one corner of the field by our waiting spy. If the suspicions of the enemy are awakened by any means, the spy shows a red flashlight to warn the airplane away. It amounts altogether to a large night's work successfully to demonstrate this little spy-collecting maneuver, and I have yet to find a pilot who really loves the experience.

To-day's ill-luck put a distinct damper on the spirit of our evening's discussion around the table. All of us were rottenly upset by the shocking news of David's mishap. Old Eli and Montgomery were in the hospital, Montaigne and De Mercey dead. Not one of these accidents had been a legitimate one. Personally I would as soon put off my trip another day, but our Swiss hiding in the woods must be salvaged.

"Let Arnold go, then," growled Malcolm Berry-

man, after a short discussion of the situation exposed the necessity of my making the trip. "He is a fatalist — believes he will die in bed and all that. Makes all the bullets miss him. Gasoline gives out and he flies on his nerve. Always falls soft side up. What will you give me to use my influence in your appointment, Arnold?"

"I intend going, Malcolm. I have been asleep all the afternoon and am feeling very fit. I have landed on the Neufchâtel field before. I know just where his Nibs will wait for me, and I insist upon bringing my man back."

"You really have had enough for one day, Arnold; but it is a beautiful moonlight night," said Captain Pieron. "I will jump in my Nieuport and go look over the situation with you first. We will fly over their field and get the lay of the land. What time is he to be there?"

"One-forty in the morning. Southeast corner of the field on the river. There are trees along the river at the edge of the field, and he will have his blue light in a big oak where it cannot be seen from the ground."

"Come along, then," said Philip, buttoning up his coat and feeling in his pockets for his glasses. "I fancy it will be just as well to give the Boches two or three false alarms before you actually land on their

field to-night, anyway. How about their searchlights?"

"Oh, they have searchlights enough," I replied, as we walked along the lane to our aerodrome. "I didn't pick out this field to suit me, but to give the Swiss a chance to work his way up the river's bank and avoid their sentries. He can reach this corner of the field by swimming all the way if he has to. I can land just inside the trees and put him aboard and get away again inside of a minute. The worst part of this arrangement is that in leaving their field from the river's end I must fly right back into their faces when I get away. There is no other way to get over the trees."

"Where are their searchlights?"

"One signal light is in the center of the field. Their anti-aircraft lights are back of the hangars."

"Perhaps some of their night fliers will be out to-night," said Philippe. "That would help."

"They are certain to be — nice little night like this."

"Then you won't be under suspicion until you land and take on your Swiss. They will take you for one of their own when you come in. As you get away again of course they will begin firing."

"Yes, and I've got to fly right at them for two

hundred yards before I can lift that heavy two-seater bus out of the field; and I'm flying right into their bally searchlights with my French aero circles painted under both wings, 'all der while.' ”

Philippe smiled. “Damn dem Dutch and our bally luck too,” he sang. “Come, pull yourself together, Arnold. Brace up and sing.”

Philippe laughed again, and I soon joined in. A little explosion smoothes the rough places in one's mind and makes one think coolly again. It seems odd I should worry about the one little moment of danger that was before me — the few seconds required in taking my Swiss into the machine and getting away again into the night with him. It is a mere trifle of a risk compared to the daily dodging of bursting shrapnel. Yet the series of accidents in our corps to-day had really upset me. No use arguing about the matter, I was ready to shy at a shadow.

It is a lonely night. A full white moon fills the upper sky with strange unreal light. Philippe and I climb to eight thousand feet and cross the trenches above Rheims. Turning north, we strike the Aisne at Aire and head down the river over Neufchâtel. The water gleams like white silver between the wooded banks where the stream twists. Flitting flashes of artillery fire dot the landscape. Some

searchlights are turned on us, but no anti-aircraft guns get our range. It is a silent night but for our motors, and a silent battle is being waged as far around us as the eye can reach. Shutting off my engine, I volplane down rather low over Neufchâtel and follow the river's bank to the German flying field. Philippe follows close behind me.

It is a few minutes after ten o'clock. A number of the Boche machines are out on the field in full glare of their searchlights. Too bad we didn't bring some bombs along with us! Eight or ten of their machines are preparing for a sortie over our lines to drop a few explosives into some aerodrome or ammunition dump. Even as we approach them they are fastening up their leather coats and strapping on their helmets. They hear our rush through the air and we see them gazing up in our direction. Next instant their searchlight leaves them in darkness on the ground and begins swinging its long finger through the sky in search of us.

We pass behind the lights and fly very close to the tree-tops and on across the field. I study the exact path I shall take three hours later when I come back for our Swiss. We cross the line of trees by the river and fly along over the very oak where the blue signal light is to be placed. Our spy is probably several

miles from the spot still, making his way stealthily to the rendezvous under cover of the woods and river. What a life these poor devils lead!

We return to our camp, and as we climb out of our machines and walk into Captain Pieron's office, he puts his arm in mine and says: "Arnold, I don't like the look of things around that Neufchâtel field. Those pilots may be going out for a bombing party, or they may smell something and are only waiting for you to fall into a trap. Do you think they can possibly anticipate your visit to them at one-forty?"

"No, that's not possible. The Swiss would die before he would tell anything. If he has been captured, they will naturally expect one of our planes over to-night to get him; and even a German imagination might hit upon this Neufchâtel flying field by the river as the most likely rendezvous."

"With true German efficiency, they will watch every square inch in the Empire if they suspect our coming," returned Captain Phil, musingly. "I think I shall send for four or five of the boys and we will talk things over."

At one o'clock six airplanes left our flying field and headed towards Neufchâtel. Mere numbers gave us all more confidence, and the change in our plans relieved me of most of my apprehensions, for it

was decided that I should take an old seaplane we had just overhauled, and in her make my landing in the river, outside the trees. The five Nieuports acting as my bodyguard would protect my landing and cover my retreat.

This inspiration was Philippe's, and we all greeted it with grins and cheers. The Germans would never suspect us of having a hydroaeroplane in our inland camp, and would not be apt to guard the river strictly, especially if our machines made a feint at their hangars.

As we got away and my heavy two-seater began laboriously to climb towards the moon, the lighter Nieuports disappeared into the night. They would go ahead and divert the attention of the Neufchâtel searchlights, anti-aircraft guns, and air scouts from my landing-place on the river.

After half an hour's climbing, I cut off the spark and glided down through the moonlight into the enemy's territory. Already I could see unusual activity about the vicinity of Neufchâtel. I aimed my machine down at the Aisne River at a safe distance below the flying field, so that I might skim just above the water, with the row of trees between me and the searchlights.

There shines the blue light in the oak tree! Now

if I can only succeed in attracting the attention of my passenger as I alight! He must be safe. He is probably lying concealed under the river's bank or possibly in the water itself.

Our airplanes are sweeping over the trees as I drop into the water.

The hydroaeroplane comes to a rest in the sluggish current. I am in the middle of the river and fifty feet upstream from our oak. Quickly I pull out my flashlight and circle the blazing light over my left side. Instantly I hear a splashing at the water's edge, and a hoarse voice calls out, "Herr Lieutenant!"

"Yes," I replied, also in German. "But don't speak so loud. Swim out and climb up on the pontoon. Hurry!"

He plunges into the river and I anxiously turn on my spark. The propeller has almost stopped turning. The engine gives one cough and expires. I prime the carbureter and work the throttle frantically, but with no result. The engine is dead, and there is no self-starter attachment! I must get out and crank the propeller until she starts. Get out — where — into the river?

"And here is the 'End of a perfect day,'" I sang soulfully to myself.



"Swim out and Climb up on the Pontoon. Hurry!"

Page 258

Captain Pieron and his four pilots are swooping low over the enemy's field and bombarding their airplanes, gunners, and searchlights with machine-gun fire. This is fortunate for me, as it attracts the attention of the sentries who are patrolling the river's bank. So far I have seen none of them. There is but one thing for me to do. The Swiss must shove my machine to shore, where he can whirl my propeller until she starts again. I had been caught in this same predicament before — had jumped out of my machine, started the propeller myself, and got away. We must risk the sentries.

The Swiss reached me in a dozen strokes, and I told him in a low voice what he must do. Pulling her nose around, he swims alongside the pontoon and edges the machine inshore as we float downstream. One of our airplanes circles over me and I wave my hand. It is Philippe. Doubtless he understands the situation, for he comes lower down as he circles and flies up the river, banks over the trees, and starts back toward me just as we bump into the shore.

"Turn her over two or three times," I called to the Swiss. I open the throttle and flood the carbureter. "Now give one long pull and look out for yourself. Shove her out into the stream, then you jump for it and climb into the front seat."

He swings down on the propeller-blade and away she goes. Wading into the water, he pushes the machine out, with the tail upstream. I open the throttle, and as we begin to move, my priceless assistant, in his dripping German uniform, climbs on to the pontoon seizes the strut, and pulls himself up into his seat. A clean get-away, provided we hit no obstruction before we can rise from the water.

Philippe passes me overhead and I wave to him that we are O. K. As we are skimming swiftly over the surface, I see the Boche sentries running under the trees towards us, rifles in hand. The noise of my motor has brought them back to the river, but not soon enough to do us much injury. Indifferent to their bullets, I raise the machine from the water, swing to the left, and climb steadily away from the enemy's camp.

Half an hour later we spiral down to a narrow canal just back of our own flying field and are surrounded by officers, pilots, and mechanics as we clamber out of our boat. My shivering passenger is helped out and rolled up in dry overcoats and carried off to headquarters by automobile. Then in a body we walked to the hangar to await the coming in of Captain Philippe and his squadron.

"Lieutenant Adair," said Jean, my mechanic,

coming up to my side, "you did not then bring back the Suisse Monsieur!"

I regarded Jean in amazement. "You idiot!" I exclaimed; "didn't you just put your overcoat around him and put him in the motor car?"

"But, no, M'sieu, that was not the Suisse. M. Blau is an old man. This was a boy you brought back with you. I think he is a German, not at all a Suisse."

I stop dead still a moment while certainties go flashing through my mind.

"Come on!" I yell to Jean, catching him by the wrist and dragging him after me. "You run like a stag and telephone to headquarters to hold that fellow. By Jove, you are right! I have captured one of their sentries by mistake."

CHAPTER XVIII

WAITING

JEAN DUPONT, able-bodied mechanic of the 3-th Flying Corps, dropped his tools and lit a cigarette. The strain of waiting was becoming too great. Apprehensions that he feared to face were making him too nervous to work. All day he had felt that something was wrong. M. Arnold Adair, his lieutenant, had left the aerodrome at daybreak this morning with the squadron. All but four of the fourteen had returned before noon. Three of this four had visited the Bar-Le-Duc aerodrome and had gone aloft again from there, after telephoning home headquarters that they were O. K. Only one was still out. That was Adair. His Lieutenant Adair! It was now six o'clock of a late September day. His lieutenant had not come home.

The anxious mechanic left the workshop and entered the hangar. Lieutenant Arrowdale was recounting his day's adventure to several of the officers. Their admiring mechanics were standing at hand, questioning the officers and offering humorous inter-

ruptions with the slangy freedom that characterizes this extraordinary intercourse between fighting pilots and their helpers.

"Arnold got a Boche early this morning," Lieutenant Arrowdale was saying. "David and I split the air trying to get the other fellow, but he was too slick for us. Funny, but I don't know whether Arnold dropped the Fokker inside our lines or not. It was so foggy y'remember, and we were cutting every kind of didos back and forth over the trenches. We couldn't tell which side of the trenches we were on. Arnold got the Hun's rudder out of whack. The Fritz was falling out of control, and Arnold was sailing above him when I left."

"And you didn't see him again, M'sieu?" inquired Jean, entering the group.

Lieutenant Arrowdale shook his head soberly. "No, Jean. I left your master with his crippled Heinie, and I beat it after the other Boche. Arnold *got* his man. I know that, and nobody else was around. Now, where did the old boy go?"

Jean turned his gaze out the open door to the north. The talking ceased, and by common consent all the men slowly moved towards the door and passed out on to the field in silence.

There was yet an hour before darkness. Several

other pilots were still out. But they had all been in at least once since the early morning expedition — all, except Arnold Adair!

“Listen!” said Brownie, Arnold’s grimy little runt, cocking an ear upward. A faint humming was heard far up to the northward. Before many seconds the lynx-eyed mechanic had discovered the homing airman, a tiny speck no larger than a gnat up against the white billowy cloud ceiling.

“There he comes — but it isn’t Arnold,” remarked Brownie, pointing upwards. Captain Pieron searched the direction indicated with his glasses.

“No, it’s David Green,” said the Captain, lowering his glasses and turning to Arnold’s junior mechanic. “But how did you know it wasn’t Arnold?”

“Engine hum, sir,” returned Brownie indifferently, abandoning the homing aeroplane and looking away again into the distant skies.

These loyal and devoted friends of their officers, the aviation mechanics attached to the fighting squadrons, carry far more responsibility on their shoulders than is apparent to the casual visitor. Fidelity to their tasks is naturally to be found in these carefully selected aeroplane experts. They live, eat, sleep, and dream with their aeroplanes. Every nut and wire,

every thread of the fabric on their respective machines is dear to them; every minutest defect receives instant attention, and like the retainers of olden days, each labors solely to make his master more proficient than his rivals. He is responsible to him alone; he works for him alone.

Gradually, as pride in his "master's" proved prowess as an air fighter merges with reciprocal friendship, the mechanic assumes a jealous and somewhat paternal care over the flying pilot as well as over the machine. The mechanic's fortunes and ambition are in his officer's charge. But the officer's life itself depends upon the eternal vigilance of his helper. Brownie was now feverishly thinking over his last hour's inspection of Arnold's machine. Had he overlooked anything?

Far away in the north and east, the setting sun is hanging glorious colors on the cloud banks over the Vosges. The quiet breeze of evening is blowing softly over the exhausted land; the dazzling glow of the sunset paints a wonderful setting for this charming landscape. But it glows on unheeded by the unseeing eyes of the comrades and friends of Arnold Adair.

In dead silence they turn and watch David Green run down a graceful letter S as he circles his ma-

chine smoothly to the near-by runway. Starting his motor again, he lurches and bounds forward by jerks until finally cutting off his spark, his dainty Nieuport comes to rest with lagging propeller, a scant ten feet from the standing group.

Throwing both legs over the side of his cockpit, David took off his flying helmet and ran his fingers through his hair. The men on the grass beside him had turned away and were again gazing off into the mocking sunset.

Jumping down from his seat, David motioned to his mechanics to run in his machine. Joining the group, he silently unbuttoned his leather jacket and turned it off. He dropped his coat, helmet, and goggles on the grass, then thrusting his hands deep into his breeches pockets, leveled his gaze likewise on the distant aerial highways to the north.

"Is it — Arnold?" finally asked David, miserable fear choking his voice, as he dropped his eyes swiftly to the others. Without answering aloud, several nodded their heads tensely.

"Sail, ho!" cried Captain Pieron suddenly, dropping his glasses. "Up there — just coming into that blue sky. See him? I can hear him now!"

"No, that's Berryman," said David. "We were coming in together."

The tiny speck drew nearer and nearer. His two alert mechanics walked on to the field and advanced watchfully, until a moment later Malcolm Berryman dropped neatly out of the sky beside them.

"Oh, but didn't I flop a choice one over on a big Boche just now!" laughed Berryman heartily, as he approached the group. "And you would never guess the prize I bagged," he went on, with ill-concealed excitement.

"What is it?" inquired Captain Pieron, interestedly. The whole field of waiting officers and mechanics gathered around Malcolm with sudden relief of tension. He must have good news of Arnold.

"I was coming in back of David there," began Berryman, "when I thought I would drop down and take a look at a big bus of ours that I saw flying very low over our ammunition camps. It was painted up with bright French colors and was hugging the ground for dear life.

"I let David go on home, and a moment later I was down alongside the observer and gave him a hail. The pilot was busy photographing. They were a good three miles inside our lines and looked as if they were taking photographs of the camouflaged stacks of munitions over the hill by the railway slip.

‘Photographs so late in the evening!’ thought I.
‘What does it mean, anyway?’

“They were less than a thousand feet up when I slid around them. The pilot was the busy man of the two, while the fellow in front just looked at me. I thought I had seen him before, but I didn’t quite recognize him until he suddenly stuck up his two fists, which were *handcuffed together*, and pushed off his goggles and helmet. Who do you think it was?”

“The Kaiser!” suggested Brownie, with a burst of impudent wit.

“Moses in the bullrushes,” volunteered Arrowdale, impatiently. “But get on with your dream. Who was it in the handcuffs, Mr. Bones?”

“Old man Blau! The Swiss spy that has been with us all summer, and that Arnold Adair thought he was getting out of the Neufchâtel creek last week,” exclaimed Malcolm, dramatically.

A look of incredulity swept over the circle, then twenty questions volleyed forth simultaneously.

Finally Captain Pieron raised his hand and quieted the clamor and inquired:

“Where did they go, Malcolm? What did you do?”

“Oh, I just naturally bagged them both,” replied

Malcolm, grinning modestly. "But let me tell you what happened. Old Blau recognized me from my mark on my machine," he continued. "Until he jumped up and waved and yelled I had no idea that anything was wrong. But as soon as he busted loose I saw the fellow behind shove a pistol into Blau's back, and then the whole show was clear to me. It didn't take me a second to get a bead on the pilot with my Lewis gun. I let go a few bullets, and then I saw the Hun suddenly come to his senses. He looked at me as I circled around him, and as I threatened him the second time he dropped his pistol and put up his hands. I waved to him to come down — and down we both dropped side by side on the same field. I covered them with my gun until they both got out and stood half-way between our two machines. Then I climbed out and Blau and I searched the Hun and took his pistol."

"But what was Blau doing there?" demanded a voice. "And how did you know the pilot was a Boche?" questioned another. "Where did he get one of our machines?" asked a third.

"One at a time now, kind friends, and we will get on faster," returned Berryman, oratorically.

"I was sure something was up as soon as I recognized the Swiss," he went on. "As soon as we

landed Blau told me that he had come over in the airplane to direct the foxy Boche over our hidden ammunition dumps. They had captured Blau the day after Arnold missed him, it seems, but he was not suspected because they couldn't get anything incriminating against him. He told them he was a Swiss mechanic in our employ, and he offered to show them all the French ammunition along the Yevre River if they would bring him over in a disguised machine. They fell for it, and with one of our captured Farmans they crossed the trenches late in the afternoon to avoid suspicion. Quite by accident they found our big depot there above Châlons. But Blau wasn't looking for depots, or anything else but a chance to get back in our lines. He intended to set fire to the machine when they were far enough inside our lines. But they didn't trust him altogether, he said, so they had handcuffed him for safety. Shows how easy the Boches are!"

"Very well done, Berryman. I will send your report to the General," said Captain Pieron, warmly. "What did you do with your prisoner?"

"Left him with the nearest artillery detachment, this side of Châlons. They're sending Blau over to headquarters by automobile. Well, I'm hungry!" Berryman ejaculated, with evident satisfaction,

"Let's go on up to the joint. Who are you waiting for? Anybody out?"

At this sudden reference to the melancholy truth which had for a moment been forgotten all eyes turned again anxiously to the rapidly darkening skies.

"Arnold is out," answered David Green, soberly, with a single shake of his head. "You lucky old timbertop, Malcolm, you'll get a cross for this stunt!"

"It's no time to think about crosses," answered Berryman, gravely. "Do you know, it's after six o'clock? Hasn't anybody heard from Arnold?"

Several glanced apprehensively at their wrist watches, but none made reply.

"When did he go out, Brownie?" called Berryman to the stoop-shouldered little mechanic.

But Brownie did not answer. Looking down at him, the officers saw the ill-shaped little runt, grimy, greasy, and ragged, standing mournfully lost in the distant sunset. He alone had not listened to Malcolm's story. Unembarrassed tears were trickling over his drawn cheeks.

An hour passed, and the motionless group still stood sadly looking away into the darkening sky. The last gleams of hope went fading as the scarlet cloud tips disappeared one by one.

What thoughts came to those daring minds as they watched this glorious sunset dying! What impotent longing to hold back the impending night for even one more hour of hope! What price would not have been passionately paid for the sound of the ravishing whirl of one more home-coming plane!

A bugle call sounded from somewhere across the fields. Out of the growing darkness came the care-free jokes and laughter of the passing poilus. The mute, motionless watchers stood like graven images, dejectedly staring into the advancing darkness.

Captain Pieron broke the silence with a voice like doom itself.

"You will report to quarters, gentlemen — immediately. Light the night flares, men."

Picking up their traps, the fearless air fighters of the 3-th Escadrille moved off the field in silence. Looking back from the corner of the hangar, with a heart heavy as lead within him, Philippe Pieron was barely able to distinguish in the falling night, the pathetic outlines of Jean and Brownie, standing still, rigidly gazing with unseeing eyes into the vanishing northern sky.

One bright morning in the early spring following, Captain Philippe Pieron was deftly breaking off the top of his egg-a-la-coque with his spoon, sitting with



What Thoughts Came to Those Daring Minds as They
Watched this Glorious Sunset Dying? *Page 272*

legs extended under the edge of the garden breakfast table in one of the most charming villa gardens of old Tours, when his servant appeared, carrying the tray containing coffee, cup and saucer, and placed them conveniently near his elbow.

“Voilà, M’sieu! And the morning journal and your letters — *une grande lettre*, which is of the military, I place here on top. A very large letter, M’sieu Philippe!”

“Very good, Jules. I shall attend to it. Great morning, eh, Jules? It is good to be home!”

“Oui, M’sieu. The very good God brings you safe to us again. But you return, M’sieu?”

“To-morrow, Jules. One day home and then to Paris. See that my shirts and things are ready.”

“I will do them myself, M’sieu. You will be going about to-day?”

“No. I shall stay at home by myself to-day. What is the news? Give me the *Journal*.”

“Little news we hear now, M’sieu Philippe. Always we win, but it means nothing at all. It is unbelievable — so many Germans we kill, but more fill their places. How many more must die before they will remove themselves back to their own country, *mon Capitaine?*”

“I do not know, Jules. We must simply do our duty and wait it out. Where are my letters?”

“Voici, M’sieu. Here is the war letter. It has been opened by the censor! What an impertinence!”

“Hullo, Julius! From the Azores! Who is writing me such a bulky lot from there?”

“Great Jerusalem’s sepulchers!

“Arnold Adair!! Impossible! Why, he’s dead, Jules! Dead, I tell you! He’s been missing since September last. It can’t be!

“But it is! Jules, you know M. Adair! He’s been here. He’s my dear friend. He’s from old Verney. We have been together since the war began. Look at this signature! There! Read that! Whose name is that?”

With agitated gesture, Philippe sprang to his feet and thrust the last closely written sheet under the startled servant’s eyes. Snatching it away again, he rapidly scanned the closing paragraphs and sank again into his chair, staring off into space, the outspread sheets of paper lying neglected upon his knee. He saw once more the crimson sunset illuminating the cloud banks over the distant Vosges — the silent group of watchers, searching with aching hearts the fading caverns in the clouds, praying that a miracle

might send issuing therefrom their dear absent comrade. "Take away the things, my old one," said Philippe gently. "And let no one disturb me here for an hour."

Clutching the precious pages with eager fingers, Captain Pieron crossed the garden and seating himself on the bench by the brook, proceeded to absorb in detail, the following remarkable story!

CHAPTER XIX

THE WALVET SCOUT

NOT a soul knows the details of my sudden disappearance and the still more extraordinary experiences that followed it on the morning our squadron flew over Verdun to the north with the Vaubecourt and Bar-Le-Duc escadrilles. That was September 24, a clear sunny day up aloft, but misty and foggy close to the ground, if you remember. The last man I saw of my squadron was Arrowdale. He was with me when I shot down my Fokker, but he left me and went after the other Fritz when he saw I had landed my bird. ~ You must have wondered what happened to me. This is the first chance I have had to get a word through to you. But let me begin at the beginning which was really a month or so before the day I disappeared.

It was some time in August then, on that unusually sultry afternoon, that we were up over the Cambria-St. Quentin country, you, Pieron, and Yale, Arrowdale, Green, and myself — that my story begins. I

lost you fellows that day somewhere in the clouds, for I was up some twenty thousand feet and there were cloud banks all the way down. The five of us had come over to take a look and see if we couldn't get a Boche over some of their aerodromes around Cambria, you remember.

We hadn't seen a sign of hostile aircraft anywhere, and I suppose you others turned back, but I kept on by myself, going in deeper, though I knew there was little chance of seeing anything through all these clouds. Finally I discovered it was getting late, and I was getting numb with cold.

I decided to call it a day and go in, so banking around to the right, I lined up with my compass and skimmed along the tops of the clouds, playing roller coaster up and over the projecting ridges which occasionally stuck up above the level of the highway. I was keeping my machine ready to sink down into the concealment of the clouds if any enemy squadron should suddenly pop up in front of me.

As I was droning swiftly along, I suddenly passed over a deep hole through the floor. I could see the warm sunshine flooding the brown landscape way below me. I shoved over the control and cut off the engine and shot straight down through the open air until at about nine thousand feet I got the flash of the

sun in my face and found I was below the clouds.

Almost at the same instant the gleam of a white plane below and ahead of me caught my eye. This fellow was climbing up in a spiral, and the flash of sun on his wings had sparkled just for a second as he had turned. Was he friend or enemy? Whichever he was, I determined to overhaul him if I could!

Climbing back again into the shelter of the cloud shadows, I stalked him, a mile or so in his rear, trying to distinguish the markings on his plane and to identify his type of machine. He had a speedy one-seater biplane. He was climbing for a higher level, and I was gradually overtaking him.

A moment later I made out the heavy Maltese cross of the Kaiser painted in bold outline on each end of the top plane. The Hun was flying a Walvet scout! Here was a piece of luck for me! The Walvets were known to us only by name. They were the only type of chasing aeroplane used by the Germans on our front besides the familiar Fokker machine and the newer one-seater Albatros.

We had never been able to bring down a Walvet into our lines where the details of construction and its new features could be examined by our engineers. I had had numerous encounters with this machine and knew it mounted two Spandau machine guns that

fired straight ahead through the propeller. Every other side was its blind side. More than one had been shot down, but each had dropped in the enemy's lines.

I knew another bit of gossip about the Walvets' tactics and that was that they always hunted in pairs, and they never gave battle except to a single enemy. So as soon as I made certain of my type, I slipped into the edge of the clouds above and looked about me carefully.

Where was the other twin? I searched the country below, and the ceiling above. St. Quentin spires and the windings of the Somme River lay spread out on my left. I was still thirty miles back of the trenches.

Cautious and wary of the trap for which these twin-scouts are famous, I searched every fissure in the heavens behind me as I flew along, but no other aeroplane was in the sky. I was convinced that my sudden descent out of the clouds had not been noticed by the Walvet, and I was satisfied from his maneuvers that he was still unconscious of my presence. I abandoned all further caution then, and set my mind wholly on the problem of first getting my Walvet prize over the lines into our own territory before dropping him.

He was as fast as my Nieuport. He had the same armament, excepting that one of my rapid-fire guns was mounted on my top wing and could shoot straight upwards as well as straight ahead.

I knew the Boche would dart away for home the moment he discovered me. Being alone, I couldn't hope to cut off his escape nor to drive him ahead of me if he wanted to get away. I must make a diving attack and then tempt him to follow me by some subterfuge. I didn't possess a great variety of subterfuges, so it did not occupy much time to select one.

Reaching up to the overhead Lewis, I dropped one cartridge into the chamber and then removed the magazine entirely, placing it in its rack. After shooting the one cartridge to attract his attention, I intended to frantically work the firing mechanism to give the Hun an impression the gun was jammed and out of commission. If that did not tempt him into chasing me towards home, I determined to stall my engine and make him believe I could not re-start it. That surely would waken his cupidity, and he ought to follow me to capture me when I alighted, if he had any sporting blood in him at all.

At ten thousand feet altitude I could glide without engine power for ten miles or more towards home before sinking to sea level. Then I would have

to start my motor again and think of "what next." If the trenches were only ten miles nearer! Then indeed I might hope to get him over our lines before delivering the coup-de-grace.

Here my clever plans were all upset by seeing the Walvet straightening out a level course to the eastward. He was a thousand feet below me and a quarter of a mile ahead. Dipping down slightly, I aimed for his tail, and with throttle wide open my Nieuport shot after him down the grade. As the space between us narrowed, I determined upon my tactics. After plumping the one shot into him, I would swerve alongside him to his right and head towards our lines, giving him a full view of the trouble with my gun. If he followed me, I would climb ahead of him and risk his bullets. If he ran away instead, I would chase him and use my other gun.

In another twinkling I am on top of him and send my one bullet through the top plane over his head. I certainly gave old Heinie the surprise of his life. Perhaps I should have made certain of a bull's-eye for it would have been an easy shot with a full magazine. But the idea of capturing the first Walvet yet brought in to our hangars held me to my crazy plan.

My swifter speed dropped me ahead of the startled Boche instead of by his side, for he swung his machine to the right upon feeling my shot, and I passed over him with less than twenty feet separating us. Flattening out and circling still more to the right, I busied myself conspicuously with my gun, without glancing at my foe. We were flying almost parallel, and headed straight for the Oise valley to the south. I throttled down until my engine just ticked over so as to permit him to draw ahead. But he was too old a bird to be caught in the rear a second time, even if my gun was jammed. He banked steeply to the left away from me. I opened up again and wheeled after him.

I saw the pilot staring at me as I came around. He was so well hooded and goggled I could make nothing of his features except that he looked young, and he was certainly not a whit disconcerted. He even waved a hand impudently towards me, and I saw his white teeth as his lips parted in a wide smile!

I edged my machine nearer his until we were again flying wing and wing. He leaned out and looked about him to see if I had any other aeroplanes with me. Reassured, the Boche lolled back and opened his mouth with a gesture of great contentment. Extending his right arm out into the wind he pointed

a wagging finger at the side of my fuselage. He was indicating my name "Arnold Adair" which was painted in square black letters on the white fabric of my machine to identify it to the rest of my squadron.

As for the Walvet, no such personal marks could be seen. The number, the squadron insignia, and the Maltese cross on the wings and tail were the only markings that appeared on its blending colors of gray and green.

This unexpected coolness of the enemy and his evident desire to be sociable rather nettled me. He was edging nearer me with an amiability that made me suspicious. I leaned out in my turn and again looked around for his scouting companion; at the same time I reached into my blouse and got my automatic pistol into my right hand.

Less than forty feet now separated our wing tips. Preparing for a pot shot at his head, I leaned forward into the shelter of the windshield and leveled the pistol. My vis-a-vis did not duck his head nor change the course of his machine in the least. To my amazement, he laughingly stuck both hands up in the air and vigorously shook his head.

The next instant he pushed up his goggles and turned to me across the intervening chasm the grin-

ning face of my dearest chum of the old Verney School in Switzerland — your cousin and, my dearest friend in all the world — Reinhardt von Bruck.



Turned to Me across the Intervening Chasm the Grinning
Face of my Dearest Chum of the Old Verney School in
Switzerland. *Page 284*

CHAPTER XX

A FOGGY MORNING

NOW to get on to the day you last saw me — September 24! Our squadron had been sent over to Nancy, some hundred and sixty miles east of our late camp, you remember. That was about a month after my extraordinary meeting in the air with my old school chum, Reinhardt.

I left our aerodrome at daylight that morning with you and twelve others of our squadron. We were sent up in our Nieuport fighting planes to protect the reconnaissance flight of you observers over the German lines in the Verdun section.

To none of you fellows had I mentioned the discovery of Reinhardt in the German Flying Corps. I didn't know just what to do about it. I hesitated about telling you because he is your cousin. He had been destined for Heidelberg and the customary military training, I knew, and I believed he had been naturally pressed into the service of his country at the beginning of the war. I had not heard from him for several months previous to the out-

break of war. His fighting in the Air Service had never occurred to me.

Among the forty-odd boys drawn together in the Verney School from a dozen different countries, Reinhardt had been my bosom friend from the day on which we first met in the gymnasium class. We were sitting together on the parallel bars the first day of school. We examined each other's gym shoes. Mine were white and his were black.

"I think I will get a pair like yours," said Reinhardt.

"Won't you take these?" I replied. "I have another pair of white ones." We grinned at each other and became friends on the spot.

We sat together for tea that afternoon, moved our chairs together at dinner, and slept in adjoining bunks the first night of our new school life. Our early alliance withstood every assault from masters, school-fellows, and town boys. In short, this Bavarian enemy is the dearest friend I have in the world.

A curious feeling now possessed me on my daily flights into German lines. The wretched thought of having already fired point-blank into Reinhardt's machine while two miles or so above earth tortured my dreams. Every night I saw hideous pictures of his lithe body, which had so many times teetered before

me on the end of the spring board over the blue waters of Lake Geneva, now lying mangled and lifeless under the wreck of his fallen aeroplane — brought crashing to earth by my machine gun!

What should I do if I met a pair of Walvets — fight them or run? How could I do either and get out of the situation with a shred of satisfaction left me? Further than that, I did not permit my thoughts to wander. The possibility of Reinhardt's blindly shooting down Berryman or Arrowdale or you paired its horror in my imagination with the equal chance of one of you killing him.

Our strange reunion in the air over St. Quentin was of brief duration. When the first stupor of my surprise left me, I cut off my motor, and Bunny did likewise. I shouted some greeting to him through the swishing air, at which he laughed, shouted back, and shook his head. It was impossible to make each other understand from our on-rushing machines. We drifted along side by side grinning at each other, speechless, until finally I waved him good-by, swerved off, and re-started my motor. I landed, just after sundown in such a dazed state of mind that my mechanics, Jean and Brownie, stood looking after me in wonder as I walked up the lane to quarters.

On this September twenty-fourth morning we were

coöperating with two or three of our adjacent squadrons. You were piloting one of the two-seaters with Major LeTour on as observer. We all of us had a conviction that something big was doing. As usual, we in our chasing machines climbed up to an altitude of fifteen thousand feet and flew over to Bar-Le-Duc where we met our delegation from the adjoining flying fields. Then in one broad squadron formation we crossed the trenches, our own detachment comprising the right end.

Your observing machines, the two-seaters, were ahead of us and far below. We saw the futile bursts of shrapnel all around you as you circled over the Argonne, and from there we followed you over the Woevre. The early morning mist was not yet dissipated. From our high elevation the face of the earth was quite indistinguishable.

In half an hour's time we began to circle back. Our squadron leaders were settling down to lower levels, and gradually all of our patrolling planes were dropping after them. Arrowdale and Green were still outside of me when we wheeled back again to the north. I judged we were then about over the trenches, but it was too foggy to see. Looking about for them a moment later, I discovered that both of them were speeding away to the east. I immediately

banked over and opened up in pursuit of them half a mile or so in their rear.

Ahead of them and advancing across our line of flight from our right, I could see two scouting biplanes darting northwards. David Green was well up with them and was maneuvering to cut them off. I altered my course to head them, keeping my slight advantage in altitude in reserve.

"Bunny," I said to myself, "is a hundred miles from Verdun, thank God!"

They were not Walvet machines, but Fokkers.

We had them beaten for speed, and with any luck at all would have one shot at them before they could get to earth. The fog was thinning in spots, but the landscape was still too hazy to permit them to select a landing field with any ease.

The chase soon developed into maneuvering tactics. We flew north, south, east and west and several exchanges of shots occurred. Round and round we circled, friend and enemy mixed up together at times; up and down we pursued them. Straight in front of the Fokkers was the only position necessary to avoid. Their two rapid-fire guns lay, side by side, along the top of the engine hood, pointing dead ahead.

We three Nieuports kept up the chase for half an

hour or longer. The rest of you had disappeared. I suppose you two-seaters went in on account of the fog. I shot away two full magazines, but the Boches wouldn't drop.

Finally I got the very position I had been waiting for, and as I came in on them I dived upon the tail of the rear Fokker, raking a row of bullet holes across him, as I approached. Great luck! I evidently cut his rudder wire, for as I climbed up to return to the attack, I saw my prize spiraling around in uncontrollable short circles. Arrowdale was hovering around him to hold him until I could regain my position.

Down the enemy swung, obviously out of control. David and the other Fokker were streaking it southward a mile away. With a wave of his hand, Arrowdale left my crippled opponent to me and headed away after David. That was the last I saw of either of them.

Following with due caution after the falling Boche to satisfy myself he was not shamming, I dove into his spiral path behind him. As I came abreast again, I saw the doomed pilot remove his hands from the control stick and quickly extend them over his helmeted head. *Bon Dieu!* The next instant I was gazing again, for the second time in five years,

into the now anxious eyes of dear old Reinhardt — my friend and my enemy!

Doubting my own eyesight, I mechanically followed after the crippled machine in its gyrations. What an incredible happening! How could it be Bunny piloting a Fokker to-day and a month ago playing his part in a Walvet team! What unfortunate coincidence had brought him away from the Somme region to the Verdun front at the same time with me? What should I do? I could not undo what I had done. It flashed across my mind that I was alone with Reinhardt, and nobody could ever know what I felt or what duty I was violating. I thought of our horseback rides together through the Black Forest, of our evenings in the music room at Echstein with his mother and sisters, of his merry chatter across the tea table at the Trois Couronnes.

Below me I saw the fog still hid the landmarks. I could not tell whether it was German or French territory we were over. A heavy bank of fog to the west indicated a river valley, but what river? In our running fight I had given no thought to the trenches or to our position above them.

Reinhardt was controlling his motion somewhat by operating his ailerons. His rudder was jammed to the right. He had cut off his engine. The eleva-

tors were unimpaired. He could keep circling until his petrol gave out and he could spiral up and down but he could not straighten out to make a landing. He must come a smash eventually!

I passed as close to him as I dared. He was keeping his nerve admirably. He waved one free hand to me as we spiraled downwards side by side. Our circles were not more than a hundred yards in diameter. I realized the difficulties the boy was having in keeping his aeroplane out of a tail spin, and I pulled away from him to avoid distracting his attention.

Suddenly an inspiration came to me! If I could only make Reinhardt understand!

I dove across his path again. Catching his attention for a brief moment, I pointed quickly downwards with my forefinger, then to myself, then again towards the earth. I intended to get into the mist below and select a landing place for him — come what might! The next instant I was diving steeply downwards with engine wide open.

Six thousand — five thousand — four — three — and down to two thousand feet I shot my Nieuport, standing almost upright within the confines of the safety belt. I approached the fog-covered earth with more caution, for there was no telling whether

lofty mountains or sunken valleys would be found beneath. Glancing back, as I entered the fog, I could barely make out the outline of Reinhardt's Fokker, so swiftly had I volplaned down. I cut off my engine to lessen the roar of my approach, although I knew the fog would so deaden the sound that my location would be difficult to determine, even to persons directly under me.

I had every muscle alert, I can promise you, as I leaned over and tried to focus on some object through the eddying streaks of white under me. It is quite the choicest attempt at a landing I have ever tried. But what else could I do? Whatever the result, I must risk it!

If the fog was lifting I would have space enough perhaps to catch a glimpse of the lay of the land and then, switching on my motor, might climb back up to guide Reinhardt as well as I could to his best available landing space. I could snatch only the hastiest glance under any circumstances. I doubted whether Reinhardt could succeed in pulling his crippled machine out of a downward spiral into an upward climbing position, or whether it would be wise to attempt it.

As nearly as I could judge, I had kept vertically under the falling aeroplane. Too wide a survey

would be useless, for the rudderless Fokker could not reach far out of its limited path.

Swish-sh-sh!! With a ripping crash my frail aeroplane seemed suddenly to hit a tornado! I instinctively pulled up my elevators. At the same instant I was immersed in a perfect avalanche of foaming water!

Blinded, stunned, and suffocating, I snatched desperately at the clasp of my safety belt, and even as I did so, I was conscious of a ridiculous desire to laugh at my disaster.

I had landed in a body of water, somewhere in France, at a speed of approximately one hundred miles an hour!

How deep, how far to shore, in what direction to swim, was I hurt, and could I disentangle myself from the wreck of my beloved Nieuport, were some of the thoughts that flashed across my brain as I held my breath under water and felt about for the top plane.

But there was no top plane there! It had been torn off by the unyielding current and had undoubtedly considerably checked my terrific impact with the water. In two strokes I was at the surface. Lying on my back, I took off my leather coat, my goggles, and gloves. Across the surface of the lake and under

the lifting fog I could see green banks of grass some two hundred feet distant. I'll swear I never saw a more pleasing landscape in my life!

I did not even abandon my long coat and glasses as I had intended, but I swam along with one hand and pulled them after me, until my feet touched ground, and carried me ashore. Reaching the top of the bank I found the outside world again shut out by the fog. It was miraculously hanging some four or five feet above the water and slowly lifting. Not a tree, building, nor object of any character was in sight!

Still too dazed to use my wits, I sat down on the grass and began slowly to remove my puttees and my clothes. As I emptied the water from my boots, I noticed that the grass where I was sitting was newly cut and was as trim and well cared for as a city lawn.

I sat stupidly speculating on this extraordinary circumstance when I suddenly heard a peculiar whirring sound from above. Puzzled, I cocked an ear upwards.

"Reinhardt and his Fokker!" I had forgotten him entirely!

CHAPTER XXI

WHOSE PRISONER?

SIMULTANEOUSLY with the sickening crash of the Fokker upon the water, I leaped in headlong. After a dozen strokes beyond my depth, I paused and called to Reinhardt anxiously.— Silence!

The waves were circling towards me from the spot where his aeroplane had disappeared. “Bunny!” I called. “Bunny, old boy! — Answer me!”

Still no reply!

I estimated the approximate point of the center of the circle and pawed forward, hand over hand, urging every pound of energy into my stroke.

Swimming on my side I struck blindly into a floating piece of wreckage. Examining it briefly, I saw it was the top plane of the Fokker with one spar attached. The grim black cross of the enemy’s Air Service glared back into my eyes as I pushed the obstruction away. Here was my prize that I had coveted several hours ago. Several hours! It was several minutes since I had shot him down!

"Well," I said to myself, "this is war!" "A casual bullet might have set me on a still different course. What does it matter? I'm a bit bewildered certainly, but I must go through with it! What am I doing out here in the water, anyway? Why am I exerting all my strength so?" My brain was whirling round and round.

A white object emerged slowly from the surface of the lake off to my right. It was the tail of an aeroplane. The engine is heavier, of course, and holds the front end down. Naturally the tail will bob up! Somewhere down along that up-pointing tail with a distorted rudder, something was fastened in a pilot's seat under the water. I couldn't recall what it was, but knew I must get it. In a second or two I had my arms around the cursed thing.

I filled my tired lungs with air and groped hand under hand down the distended buoyant tail. I noticed the hateful Maltese Cross outline painted on the tail, as I passed it. Its very frightfulness startled my numb consciousness into activity again. I must get something out of its clutches before it got me — and that something would be very precious to me. It was held in by a strap around its middle.

There it was! I groped around the strap until I found the fastening. One hand freed it, while the

other forced itself under the crown of a flying helmet tightly fastened over the forehead of a slim young lad. Placing both feet on the edge of the cowl I lifted — and the lad came with me. Easy enough! With one long swing we both were rising together, up — up — up, out of this agonizing atmosphere.

Gulping down several mouthfuls of sweet air, I held on to the Fokker's tail with one hand, and with the other pulled poor Reinhardt's face up close to mine. His eyelids were closed. The familiar blue tracings of delicate veins showed across his temples as of yore. With some difficulty I hoisted him, stomach downwards, across the tail of his own fighting machine, and opened his mouth with my thumb and forefinger.

Alternately I pounded him on his back, slapped his cheeks, lifted his arms, and went through the restorative rigamarole, as set down in big black type under Lesson XVII. Not a bruise was discernible as I removed his leather flying helmet. So tight was its fit, Reinhardt's hair was not even wet!

He drew in a shuddering breath, and I supported him in as easy a position as my unstable water treading would permit. Gradually his sensitive eyelids quivered. The next instant the dear boy's honest eyes were upon me.

“Well, old Chingachgook — my old one — *bon jour*,” said my captive slowly. “Wait ’til I empty myself — and I’ll smash you for this!”

Clinging to the floating plane we paddled to the nearest shore. I glanced at my wrist watch. It indicated quarter past seven — and was still running!

“Seven-fifteen, Bunny, you lazy pup; there goes old Selig’s breakfast gong. No cream on your oatmeal again this morning! Three pages of Latin prose after chapel for yours!” I ejaculated, as I threw myself on the bank beside him.

“The question is, Bunny, are you my prisoner, or am I yours? Where the devil are we, anyway?” I inquired, as we stood on the grass, wringing out our clothes a few minutes later.

“You can investigate me, Arnold. Suppose we toss for it,” replied Reinhardt, swatting me joyfully on the bare back with his wet sock. “I propose that we entrench here in the middle of the lake until something turns up to identify itself. I have no particular desire to step out of this fog into one of your New Zealanders.”

“No more do I care to bump into your Crown Prince!” I retorted. “But have you really no idea of where we are? Don’t you know which side of the blooming trenches we are on?”

"Not I, old son," Reinhardt replied, putting a broken aeroplane spar on the fire as though he hadn't another care in the world. "I've seen this lake a hundred times and so have you, but which lake it is, out of the dozen about here, is past me. When the fog lifts, the guns will pick up, and then perhaps we can tell."

"When the fog lifts, then perhaps they can tell us, too," I retorted. "That's a priceless idea of yours, Bunny. One of us is in for it as soon as this fog lifts."

We both burst out laughing at the absurdity of our situation. Here we were, two enemies, standing stark naked over a puny little fire we had lighted with my tinder-light, drying our clothing, and wondering whose camp we were in. Our wrecked aeroplanes lay buried side by side in the same watery grave.

Reinhardt extended his waterproof case and offered me a cigarette. I took one and examining the label, found it a celebrated Turkish product. We lighted up from a blazing piece of aeroplane spruce and sat down with our toes towards the fire.

"Captured by the great American Ace! What are you going to do with me, Lieutenant Adair? What's this I hear about your torturing prisoners

for information? Or is it only the British who do that?"

"Bunny, don't be a bally ass! Who ever made you believe such a rot?"

"It isn't rot, Arnold, and you know it," returned my friend fiercely. "We have absolutely indisputable proof of the most villainous atrocities your soldiers are practicing on German prisoners. That is the only reason we permit reprisals."

I gazed at him in stupefaction. "You really believe that?" I groaned.

"Oh, come, Arnold. You needn't put on with me. I'm not charging *you* with anything. Except I must admit I blame you for taking sides with England against us. You are the most gullible nation on the face of the earth — you Americans. You are rich and strong and far removed from the war. England couldn't force you to come in as she has forced all the lesser nations. So she planned the most stupendous propaganda to hoodwink you, and she succeeded."

I gazed at my old chum in amazement. Bunny went impetuously on.

"You were blind to the fact that England could suppress all truth about Germany — could magnify her own virtues and emphasize our mistakes to

America. England first cut off all communication between us and then gave you only such information as would help her and inflame your anger against us. And you took it all in like a child."

"Reinhardt, I dislike to argue this thing with you — it will only make us both angry. I joined the French Air Service within a month after Germany marched upon Paris. So you cannot blame England with hoodwinking me."

"Well, why did you do it?"

"Because I knew German soldiers marched into French territory. I was in Munich when the war broke out. I knew that the French Nation ordered her troops to retire ten kilometers back from the border so as to avoid possible conflict. They told me so in Munich, and laughed about it. France wanted to negotiate to avoid bloodshed. Germany arrogantly ran over an unoffending people without stopping to parley. It was a bullying, brutal thing, and I jumped in to help punish them as they deserved.

"I don't care a hang about subsequent atrocities," I went on vigorously. "War is hell, and there is no nice way to conduct hell. Every atrocious act imaginable is done by brutes of every nation when their hatred is inflamed. We are encouraged to believe you have brutal instincts, and your men are

taught to believe we practice atrocities. Personally I know you, Reinhardt, and your family. I know many other German families whom I love and admire. I don't believe *you* are brutal. I am surprised that you believe all that rot that is fed into your ears about French or English brutality."

"Arnold, give me credit for some intelligence. I appreciate the military necessity of teaching our men to fear being captured by the enemy. You teach your troops the same thing, you have just admitted, by willfully inventing cruelties they will receive from us. You raise money at home, and you persuade your troops to fight by artfully inflaming the public imagination against us. The worse you can make them hate us, the more furiously they will fight, the more money will be raised, the more sacrifices will be made to carry on this war of hatred and revenge," Reinhardt declaimed eloquently.

"But why do you spring to arms to conquer us, while you supinely acquiesce in England's dominating the seas — England, your old enemy and the eternal enemy of France!"

"Because Germany wanted war. England wanted peace. But look here, Bunny! Here we stand half naked, arguing about this damned war when we haven't seen each other in five years! For God's

sake, let's drop it — now and forever! To think of our meeting here like this! Twice, God forgive me! I've shot at you trying to kill you. You! Bunny!"

Reinhardt grinned broadly.

"And once, Chingachgook, you tried to make me believe your gun was jammed. Oh! You poor Indian!"

"Don't go to sleep like that again, in the air," I rejoined, somewhat nettled. "But isn't this an extraordinary mess? Tell me about yourself. When did you get into the war?"

Reinhardt related the circumstances of his early flying school training the year before the war began, his months spent in the Mercedes motor factory, his subsequent trying out with the Zeppelin works on Lake Constance. He had completed three years at Heidelberg. The summer months immediately preceding the beginning of hostilities he had spent in the flying fields near Berlin. He was made lieutenant in one of the first bomb-dropping squadrons organized in the German Air Service. A year later he was given a captain's commission and now headed the most famous Flying Corps in the Bavarian Division. Ever since the Battle of the Marne, Reinhardt had been constantly flying along the Western Front.

I in turn recounted my experiences since we had

last met at Echstein. My trip to Europe with my family during the summer of 1914 and our intention of motoring to Echstein, when the war suddenly broke upon us; my subsequent enlistment in the French Air Service and the different sectors of the front I had seen.

We spent upwards of an hour around our fire in the small hollow beside the lake. Suddenly Bunny jumped to his feet and pointed to the lifting fog.

"We must get out of here, Chingachgook! In a few more minutes we will be rudely displayed to the vulgar eye. Where shall we go?"

Together we walked up the bank and looked over our surroundings. The fog still obscured the landscape beyond a few hundred feet.

"You take the left, and I'll take this side, Bunny," said I. "And we'll walk around the lake until we meet. Perhaps we can learn something about our location."

"Farewell, my faithful swan!" quoted Bunny, waving an adieu to his mangled aeroplane in the middle of the lake. "Somebody's going to find your remains very soon, and then they'll drag the pond for poor Bunny's remains. Well, here's luck to them."

Extinguishing the fire in the hollow, we shook hands in silence and separated.

CHAPTER XXII

AN OLD SCHOOLFELLOW

LEAVING our leather coats on the grass, we set off in opposite directions around the bend of the lake. Guns aplenty were sounding all around us, but a foggy atmosphere is a rotten conductor of sounds, and nothing distinguishable could be made of their whereabouts or character.

I had not walked two hundred yards when I heard our old school whistle. I stopped and whistled back and after listening in silence a moment, ran back to meet my old chum. I found he had plumped into a graveled roadway lined with a box hedge, running around his corner of the lake, and disappearing back over the hill. He now proposed that we go together and investigate its route.

Picking up our traps, we left the lake and climbed the hill, keeping close up outside the hedge for protection. Before many minutes we climbed up out of the mist and stood gazing there, lost in wonder and speculation. Before us lay a magnificent estate. Fruit trees and a neat, low-running vineyard covered

the foreground. In the rear, ivy-covered, stone-walled buildings were almost hidden by a stately park of trees. Not a soul was in sight.

We looked at each other in questioning silence a moment, then turned again to search the limited horizon for some familiar landmark. The unexpected feature of the exposed landscape before us was the entire absence of shell holes and the usual ugly devastations of war. Except for the distant sounds of booming guns, one might have fancied he was looking over some charming old country estate in the Loire district. It was the grounds of a palace.

"It's well screened from aeroplane observation," remarked Bunny.

"Blest if I know where it is," said I.

"Don't you hear those heavy guns back of us? Those are Krupps. I know them. There's nothing sounding ahead of us, so *we're back of the trenches*. Arnold, I call upon you to surrender. You're my prisoner!"

"You go to the devil," I replied. "I've worked with that heavy battery a dozen times. That is French. I know exactly where we are now. I am sorry to disappoint you, old boy, but *you* are in a deuce of a fix."

"Very well, if that's the way you feel about it,"

rejoined Bunny pleasantly, "but I'll just bet you a *Thé Complet* at the Trois Couronnes you are wrong."

"Done!" I cried, shaking hands over it.

"And now I'll show you something, my poor lad," I went on. "Do you see those grapevines? Did you ever know a German to cultivate vines as thick as that? Those are French, and you know it."

"I smell grapes," sniffed Bunny. "Be they French oder German, I'm going to have some, if I'm shot for it."

"*Bien*," I replied, turning towards the vineyard, "but drop your German and speak French in here."

"Do as the Romans do," grinned Bunny. "Speak in gestures."

Stooping low to conceal our movements, we left the orchard and entered the middle of the low rows of grapevines. Here and there we filled our flying helmets with choice bunches — purple, white, and red. Knowing the French custom did not permit grape skins to be scattered about the ground and not desirous of attracting attention to our unsolicited visit, we sat down in the path together and dug neat little trenches along the edges, where we carefully deposited all skins and stems and covered them over with loose dirt.

"Here! I'll dig and you eat, Arnold," said

Reinhardt finally, as he completed his third hatful. "You've got no limit to your capacity nor your conscience. Remember, I'm going to charge you for every grape you take when I get you into camp. I'll have to roll you there if you keep this up. Don't they feed you at all in your — ?"

Bunny suddenly interrupted his genial flow and stiffened alertly. At the same instant I heard a few yards away, voices — women's voices! Two or more farm women were working their way along the rows opposite us!

As we strained our ears and stilled our slightest movements, the voices slowly approached. I looked across the path into Reinhardt's eye. Only an amused flicker of his lids indicated that he understood me. We were in my own lines. The women were calling to each other loudly in French!

Motioning Reinhardt to remain where he was I cautiously moved up the path, keeping within hearing of the voices. I hoped to learn from their conversation something which might indicate our location and surroundings. Their infrequent remarks unfortunately were personal and inconsequential. Soon I perceived we had reached the end of the rows, and their next trip might lead them down the very alley we were concealed in.

A well trimmed hedge separated the vineyard from the park. Beyond the graveled roadway which led to the lake, I discerned several barns and outbuildings among the trees. Determined to find out our whereabouts without risking detection, if possible, I cautiously skirted the hedge, crossed the road, and advanced from the rear towards the barns. At any rate I could gain this cover unobserved and must chance discovery there.

Bunny was out of the war. Thank God I had not killed him. To think of the numerous encounters we had had in the air with his notorious squadron for the past two years — from Verdun along the contested lines all the way to the North Sea! Time and time again we must have unconsciously emptied our magazines into each other's machines and returned home, bitterly disappointed in our failure to win another palm!

What lucky star had been following us both in all these months of air fighting — and now had brought the dear little beggar safely down into my hands!

I would write to Madame von Bruck immediately and tell her Reinhardt was safe and would be in good hands until the end of the war. And Elizabeth! Would she ever forgive me? Could I ever hope to see her again? I would fly far over into the Rhine

valley to-morrow and drop them a letter which will be sent on to them without delay.

Feeling magnanimous and joyful over my contemplations I stepped through the rear stable door. I was suddenly brought up frozen in my tracks. From an adjoining room, evidently used as a garage, I heard a German officer distinctly berating his mechanics in crisp military phrases!

For one incredulous instant I stood there, indignant and belligerent. Then I considered briefly and in two jumps disappeared up the ladder into the hay loft. "Ye Gods! What does this mean?" I demanded of myself furiously. "What are those devilish Huns doing in *my* house — using it as their own! How can I be mistaken — that French vineyard — those women! And I've got a captured enemy pilot out there. What shall I do about him?"

In my first burst of temper I came near throwing caution to the winds. I felt like wading into that obstructing trio below and knocking them into incoherency with my fists, then leading Reinhardt by the ear triumphantly to my quarters.

Gradually, as I listened to the loud voice of the Prussian below stairs, I realized that all my cocksureness was uncontrollably oozing out of me. Lower and lower sank my spirits as the certainty grew upon

me that I was actually in German hands. Then suddenly, one significant irritable remark by the taskmaster below left me cold with dismay.

"Stupid imbeciles," he shouted. "His Highness will cut you to pieces if you delay him one instant more! You are fit for a garage keeper — yes, but for His Highness — No! Bah!"

I confess it took a few moments to adjust my thoughts to this sudden turn about of affairs. My one clinging idea was to get to Reinhardt again, tell him good-by, and beat it. I must see him again — alone. The forenoon was getting on, and streams of soldiers and servants would be about. His Highness, indeed! Under the circumstances, I didn't take to the idea of leaving my refuge to go back to our rendezvous in the vineyard. There were the French women, however. Compelled to work for their brutal masters, of course. I might find a way out through them after nightfall. What a devil of a mess!

Le Bon Dieu! Who was that speaking? *Reinhardt's voice!*

The clamor within the garage ceased abruptly. I held my breath until I nearly burst.

"What place is this, Lieutenant?"

"Who are you?"

"Captain von Bruck, Flying Corps, of the 2nd

Bavarian Division. I was shot down this morning and landed on this place. I want to know where I am and how to get a message to my headquarters."

"Yes, I know you, von Bruck. But I don't know you are a captain. Why are you carrying your coat?"

"Felix Domaz!" exclaimed Reinhardt in incredulous amazement.

The name struck my memory swiftly, leaving a dirty blot where it lodged. Felix Domaz — the High and Mighty — the one bully of our boyhood days at Verney — the only enemy both Bunny and I continued to fight up to the very day of our graduation! I had last seen him the day he insulted me publicly on the streets of Berlin.

Felix Domaz of Potsdam! I might have guessed it when I heard the brute cursing his patient workmen. I had received so many facers in the last few minutes, my stock of surprises was exhausted. Not even the appearance of Bunny's Kaiser himself would startle me now.

But Reinhardt was talking. His voice leveled into the calm authoritative tone assumed by the superior to a subordinate officer.

"My coat is carried because — it is a warm day," Captain von Bruck said with ironic emphasis.

"Perhaps I did not desire to be seen until I was certain which camp I was in. Now! Observe the insignia of His Majesty's Flying Corps!"

The click of Lieutenant Domaz's heels as he came to a rigid salute reached even to my distant ears.

"Kindly answer my questions, sir! What place is this?"

"This is the — Headquarters of His Highness' Staff," replied Domaz, the thinly concealed insolence in his voice emphasized by his deliberation of reply.

I could distinguish Reinhardt's exclamation of surprise.

"Near what town is this?"

"You are about six miles out of Conflans."

"Conflans! And my squadron is at Stenay! Where is your telephone? I want my mechanics to bring over another machine to me here immediately and to fetch along rope and tools to get my Fokker out of the lake. Kindly send the message."

"I have other business, Captain von Bruck," sneered the Prussian. "I will take you to the Adjutant, who will do as he sees fit. Come with me, if you please."

"Your clothes are wet, Captain. How came you to fall into the Lake?" continued Lieutenant Domaz, after he had set the mechanics again about their work

and prepared to escort his unwelcome guest to the house.

“I fell where gravity desired me,” replied Reinhardt briefly, as the crunching gravel under their boots announced their departure. The barn was left to two relieved mechanics, the fragrant hay of Alsace — and me.

CHAPTER XXIII

THE LINEN DUSTER

THE whacking and banging below me continued, but in spite of the racket and the torture of my disappointment, I slept intermittently, my wet handkerchief over my face and a camouflage of hay over it. Finally the buzzing of a motor awoke me, and I turned my face to the wall in anticipation of being dragged from my cot as usual, by your relentless orderly. No such luck, however. Five unyielding straws jabbed me simultaneously. I came to with a start.

Creeping to the window I saw a smart touring car back out of the garage and pass up the driveway toward the house. The rear of the house alone was visible. I looked at my watch. Six o'clock! I had slept all the afternoon!

Spending an hour or so in gloomy meditation, occasionally twisting and rubbing some of the pains out of my damp back and legs, I turned over the situation in my mind. Well! Here we all were—Domaz, von Bruck, and Adair, classmates all, of the

old Verney School. Separated for five years and now suddenly all three thrown unhappily together within the confines of the carefully guarded domicile of His Highness! One of the three would cheerfully remove himself from the August Presence without arguing about it — but how? Conflans lay half-way between Verdun and Metz. I was a good thirty miles away from No-Man's-Land — that impassable barrier stretched across France. And I was on the wrong side of that impassable barrier. Impassable — save by the air! No use thinking about the air route now, however.

Bunny was gone. Well, I couldn't blame him. He could do nothing else. He certainly couldn't have assisted me to escape. His efforts in that direction could not have benefited me and would inevitably have ruined him.

I descended the ladder and cautiously examined the premises. In the garage end of the barn I found a magnificent Daimler car, apparently tuned up into the pinkest of condition. I even plumbed the petrol tank and found it full to the top!

Deep regret filled me as I considered the pros and cons of a quiet little joy ride by myself, and finally reluctantly decided it wouldn't do. The very lack of sentries inside the premises indicated an exception-

ally strong guard without. We had dropped into the center of the circle from above. I must learn something about that circle before attempting to break through. I appropriated a linen duster hanging over the rail in the tonneau, and put it on. No edibles apparently were kept in the garage for sudden emergencies such as mine. I decided to pay another visit to the vineyard. It was not quite dark.

Provoking recollections of prisoners' fare at Karlsruhe entered my mind. Two of our aviators were there then. They had written home descriptions of their food, and it had not appealed greatly to any of us.

Grapes were enough for me while they lasted. I wondered how long they would last as I gathered a dozen bunches and sat down under cover to eat them. I should need water too. Well, there was my lake; I found it. I should go down there directly for a drink and a cigarette. I could do myself very well here in the holy sanctorum of the enemy camp. Things were really very comfortable. Darkness had settled.

Suddenly I jerked up my head. A low whistle had sounded! The old Verney call! Bunny, by Jove!

In another minute I was in his arms. He was sit-

ting beside the tiny trenches we had been filling with grape skins when we parted this morning.

"Quiet now, old Chingachgook," he spoke in German, "there're a dozen men down by the lake. They'll be by presently, and then we've got a little maneuvering to do.

"I've got a big Gotha three-seater down there, and it's all ready for a hop. My two mechanics flew it over here to take me home in. They had a bit of trouble getting the Mercedes engine out of that pond. It took me half an hour's diving to fix it so they would. And now they're going to let it go until morning. All but Zimmer will be along in a couple of minutes. I told him to stay to guard the machine."

"But what's your clever little idea?" I said.

"Please remember you're my prisoner, Arnold, and don't be impertinent."

The sounds of voices reached our ears. We looked at each other silently and waited. As the group of men passed up the road, Reinhardt rose to his feet and counted them.

"Now we are all right. Eleven of them have gone," said my captor, as he sat down again by my side.

"How did you know I would be here, Bunny?"

Tell me about this morning. How did you discover you were among the — among your friends?”

“Friends! These Prussians? I never knew one I’d call my friend. But I saw one of them — our dear old school fellow, Domaz — come out of the house and walk to the garage. I was just behind you when you left the vineyard, but I didn’t dare call to you. Then I saw you jump the hedge and walk like an ass right into their arms. Before I could get over to stop you, I saw you making for the garage. There was only one thing for me to do then. I walked in and told him who I was.”

“Yes, I know. I heard all you said. I was in the hay overhead.”

“Uncommon good idea of yours to get out of that hay when you did, Arnold. That squad is going to sleep there to-night.”

“Bunny, have you seen Domaz since the day of our last boatrace at Verney?”

“Yes, and had a whacking good duel with him too, at Heidelberg. But I’ll tell you about that later. I didn’t know he was attached to the Staff here. But come, let’s go.”

He was up and off towards the lake before I could put another question about his plans. As we hurried along, he cautioned me to keep silent. Reaching the

edge of the orchard, Reinhardt stopped and considered me a moment.

"Where did you get that duster?" he whispered.

"I borrowed it."

"Turn up the collar and put on your helmet and goggles! Now, come along and climb into your seat without speaking a word. I'll do the talking."

We walked quickly along the border of the meadow, Reinhardt narrating the details of some imaginary air attack on Verdun as we approached within hearing distance of the Gotha. His mechanic saluted and regarded us stupidly. I turned my back to his lantern. Reinhardt spoke to him sharply.

"Zimmer! Go up and sleep at the barn to-night. Be back at daylight."

The mechanic saluted and left us.

I climbed into my seat, trembling with an excitement I'd never expected to experience again. A greasy handled mechanic's hammer lay on the spot where I sat. I swore at it nervously and shoved it back of the cushion. Bunny swung into the front seat and began testing his controls. I leaned forward and spoke into his ear.

"Bunny, there's one thing for cert. I'll not let you take a chance of landing me down in French lines."

"Shut up," was his polite reply. "You've got a bet to pay me yet to-night. You're a good little guesser when it comes to —"

"*Or so moment!*" snarled a menacing voice in our rear. Both of us whirled around in our seats. Leaning forward from behind the lower wing of the Gotha, Lieutenant Domaz, the High and Mighty enemy of our schooldays, stood outlined quite distinctly in the darkness. He gripped the edge of the cockpit with his left hand. With his right he covered first Bunny's head and then mine with a pistol.

"Lieutenant Adair, I believe!" sneered Domaz, extending his weapon within a yard of my nose. "So sorry not to have met you earlier to-day." His evil face wore an exulting smile that infuriated me. "Don't move, either of you, until you're told, or I'll kill you both — with much pleasure."

"What's the meaning of this!" demanded Reinhardt, vainly endeavoring to control his voice. "Put down that pistol, Lieutenant Domaz! Obey me!"

"Who have you got with you, Captain, in there?" inquired the gloating Prussian, switching his weapon over to Bunny's face. "You ask what this means? This means that you are my prisoners. Yes, you too, Captain von Bruck. You and your spy friend, Arnold Adair of the French Flying Corps, whom you

are assisting to escape. Do you care to lie about it, my Captain?" taunted the loathsome wretch. "I would like you to deny it — come now!"

"How do you know it is Arnold?" inquired Reinhardt feebly.

"Because I found his wrecked machine alongside yours in that pond, you damned fool," shouted Domaz. "And his rotten name's painted across the length of it. I suppose you didn't know it was Adair! I suppose you don't know he has been in hiding here all day as a spy, and now is being taken back by you — damned traitor! Well, I knew it and I knew you'd try to save him. So I have waited around all the evening to catch you in the act. Now what have you to say?"

"He saved my life in that pond to-day, Felix —"

"Bunny!" I cried, in horror. "You're not going to beg mercy from this hound. We'll take our medicine!"

"Yes! Lieutenant Adair has it, exactly. You will take your medicine. If I were not so certain of what that medicine is to be, I would pay you what I owe you myself."

"Now get out of that machine," he snarled. "This side! You first, von Bruck. Stand here where I can cover you both."

Bunny obeyed in tragic silence. He was too overwhelmed with the sudden revealing of his impending dishonor to think of resistance.

I stood up behind Reinhardt as he let himself down on to the lower step. Domaz cursed him as he watched him guardedly. As I threw my left leg over the edge of the cockpit, I grabbed the slippery handled hammer in my right hand. With one furious leap past Bunny's shoulder I launched myself across the wing of the aeroplane head-first at the odious figure beyond.

He fired at me point-blank, while I was in the air, — and missed. I smashed my two-pound hammer full in his ugly face before I touched the ground, and we both fell in a heap under the edge of the Gotha's tail.

Lieutenant Felix Domaz didn't move as I flung myself upon his prostrate body. Bunny stooped down and picked up the pistol. I got to my feet and stood over our fallen enemy with the hammer.

We presented a memorable picture as we stood there motionless in the starlight. I know I shall never forget it.

Reinhardt spoke first.

"I am not a traitor, Arnold, as that beast said. You are no spy. You could have killed me, but in-

stead of that you came down here to save me. And you pulled me out of certain death in there." Bunny nodded towards the water.

"But what he said is true. I was aiding an enemy to escape. I know I am right in getting you out of this, but nobody else would believe it. He sneaked around here alone in the hope of catching me in the act. Well, he succeeded!" Bunny concluded miserably.

Only too clearly did I follow Reinhardt's meaning. What we both construed as decent and sporting, would avail us nothing against Domaz's story before a Court Martial. And this cursed officer's duster! I began to unbutton it frantically.

"What's the use?" said Reinhardt sadly. "He's seen you in it. Technically you are a spy. You covered up your enemy uniform. Oh, it's all my fault."

"Bunny," I said savagely. "I'll never let you suffer for this. You are innocent of any real wrong. Get into your machine and go! This wretch is the only person who has seen me in this duster. He has captured me. Well, let him fight when he wakes up. I promise you he will never testify against you."

Bunny pulled himself together before I had fin-

ished. Stooping over he seized the prostrate Domaz by the feet.

"Quick, Arnold! We forgot about his shooting. Some sentry will be here on the run in a minute. Up with him. Put him in the seat with you! Is he dead?"

"Unfortunately not," I replied.

"Well, we couldn't leave him here to be found, anyway," said Reinhardt. "In with him."

None too tenderly we slid our unwelcome passenger over the edge on to the floor of the fuselage. I was beside him in a jiffy, and before I had my safety belt around me, both motors had begun to whirl.

Still gripping my miraculous hammer, I poised it conveniently over the Prussian's head, as the huge biplane swept forward like an express train, and with a powerful leap, left the ground and soared away into the starry sky.

"There are no impassable barriers, now," I thought, as I looked below and caught the last reflection of innumerable stars in the mirror-like surface of the lake that I most fervently hope I never shall see again.

CHAPTER XXIV

COLLECTING A BET

AT eleven P. M. on that eventful September day, old Frederick, the waiter of forty years' dignified service at the Trois Couronnes, was insisting that it was altogether too late to serve *thé complet* at this hotel. I wish you could have been there. (We told him you were now Mon Capitaine.) No such extraordinary midnight order had been given him, he said, since — since —

“Since the farewell party on the terrace to old Chingachgook, eh, Freddy?” said Bunny, patting the old fellow affectionately. “Well, Arnold is paying off a bet to-night, and we haven't much time. Run along now, my son, and mind you bring plenty of grape jam for Arnold — he's taking the grape cure again.”

“Monsieur Arnold! Monsieur Reinhardt! Mon Dieu! Mon Dieu!” The old man sank into a chair, regarding us out of staring and then streaming eyes. With trembling hands he fumbled in his capacious pocket and produced a gold watch and

chain, a parting gift from Bunny and me. Opening the lid, he pointed to our inscribed names and date.

"Five years, last June! And to think the old man didn't know you!"

"Frederick! Not a soul is to know you have seen us to-night. In fact, you must forget it yourself as soon as you have fetched us some hot coffee," said I, pressing our old friend's hand. "We will tell you all about it when you come back. Hurry! We are half frozen, both of us. Bring what food you can get quickly."

The terrace was deserted. Evil days have obliterated the well remembered entertainments dispensed to its overflowing guests by the *Trois Couronnes* before the war. Only an occasional soft light now shone from the windows of the hotel above us, where as you remember it gaiety galore used to light up the entire façade until long after midnight.

Bunny and I found our old table in the corner of the terrace. We had discarded our flying equipment to avoid attention. We stretched out our legs under the table, exhibiting side by side the rival colors of the two enemy air forces.

"Still worrying about Domaz, Bunny?" I inquired, as the dear boy heaved a tremendous sigh.

"I can't see any way out of this mess," returned

Reinhardt thoughtfully. Then relaxing into his old merry smile, he continued, "As I was about to remark, Chingachgook, when I was interrupted, you are a good little guesser when it comes to picking out French encampments and such like! Hope you'll pardon my haste in coming over to collect the bet."

"Bunny," I said, "I've got a confession to make. When I believed we were wrecked inside my lines, I intended seeing you were comfortably quartered with us for the balance of the war — simply to keep you out of further danger. You have been twice as generous to me. I didn't see it then, but I didn't dream then of our positions being reversed. Now I see what a fool I was to think of your being contented — a prisoner."

"And now," I went on, "the question with me is, should I accept your generosity and go back to fight you when I didn't consider doing that for you —"

"Here, Arnold, drop that!" interrupted Reinhardt, swinging around and facing me. "We're even — you and I — if you insist upon computing obligations. Our countries are even too. You've given me back to my country — twice. Perhaps I'm taking the law into my own hands, but I am not cur enough to accept such a favor from France without returning it if I can. You go back as soon as you

can get back and good luck to you! If Domaz —"

Bunny broke off and looked away. I watched him for a moment, then reminded him.

"What about Domaz?"

"Well — I don't know!"

"But Bunny, Domaz can't do anything now! How is he going to get back into German lines? He'll be interned here in Switzerland. He has on his German uniform. Nobody will believe his story of being carried here by aeroplane. Nobody saw us come in. Nobody will see you leave. In fact, Domaz himself won't know how he got here, for he was still unconscious when we locked him up in the Gym."

"He ought to go to the hospital," said Bunny.

"Leave that to me. I'll see he gets there. And they will never let him get back to his command. Even if he did, Reinhardt, nobody would believe his preposterous story about you. You will be away. Months will have passed. He hasn't a bit of proof. No one else saw me there. My machine is there — yes. But a pilot may fall out and land ten miles away from where his aeroplane struck. Domaz is more apt to be court-martialed for this absence without leave."

I paused, out of breath. Bunny pressed my knee.

"Here comes old Frederick with the tray," he said.

"By Jove, I believe you are right!"

As we swallowed our *café au lait* and scrambled eggs, we acquainted Frederick with our day's experiences. He listened incredulously at first, then exhibited utter disbelief, pathetically mingled with symptoms of pain at our heartless chaffing.

We burst into shouts of laughter ourselves, as we saw the old fellow's stubborn refusal to believe our story of the night aeroplane flight. He smiled appreciatively at that and begged us not to try any more tricks on the old man.

"You couldn't make me to believe you boys would fight one against the other," he exclaimed, nodding sagely. "But how did you get here now?"

Again we exhibited our Flying Service uniforms, our helmets, and even the insignia on our collars.

"You can't make me believe M. Arnold is only a lieutenant and M. Reinhardt is a captain!" We roared again. He shook his head. "But will the dear lads come up to the chalet and see the old woman? She would have a fresh mocha cake in the cupboard this minute, most likely!"

Reinhardt jumped to his feet and took the old man by the coat lapels.

"No, we can't, Frederick, and no one must ever

know you have seen us to-night. Understand? Not even *votre femme!* ”

The old man bowed gravely.

“ And there are several things you must do for us, my old friend. It is now almost midnight. My aeroplane is under the trees at the far end of the old football field. You will see it yourself there, and then you will believe me! ”

“ Now we must have two things — a suit of clothes for Arnold and thirty gallons of petrol for me — and we must have them within an hour.”

“ The clothes for M. Arnold — yes; but the petrol — one cannot buy petrol in Switzerland since the war. It is impossible! ”

“ Where can I steal it then, Frederick? I must have it! ” said Reinhardt, throwing down some gold pieces. “ I must be two hundred miles from here before daybreak. And if any one should discover my machine there on the old school field, I will be interned. You see, I must have the petrol! ”

“ The old school field! ” repeated the old man shrewdly. “ Perhaps now M. le Professeur has not locked his garage to-night. I will go immediately and examine.”

But Bunny and I were off the terrace, down the familiar old steps, and away into the quiet midnight

streets of Verney before his speech was finished.

"Get me a suit of clothes and meet us there," I shouted back, as the old man stood staring after us in open-mouthed wonder from the top of the steps.

"Can you make it, Bunny? It's only a hundred meters to the fence!" I stood, empty petrol buckets in hand, watching Bunny strap his safety belt around his waist.

"Easy! I can clear that like a shot! But you've got to move along, old boy, as soon as I start my engine. Look out for the night watchman. What time is it?"

"One-thirty!"

"Good. I'll drop on my own field by four. Where do you go from here?" inquired Reinhardt, pausing to look for the last time into my eyes, his hand halfway down to the self-starter.

"Geneva!" I replied, trying to speak through a lump in my throat. "Bunny! Is there anything I can do for you — or Elizabeth and your mother? I have been wanting to ask you about them all day."

"Mother and Elizabeth are in New York, Arnold — to stay," Reinhardt answered, straightening up and leaning towards me. "They hate this war so,

they sold Echstein and have left Germany forever. I have not heard from them for months."

"Arnold!" Reinhardt spoke earnestly and quickly, "there *is* one thing you can do for them and for me too. Tell them — tell them — I am coming to join them — as soon as I can. They will understand."

He pressed on the lever. The self-starter spun. "Thanks for the tea, Chingachgook, old Indian, and mind you leave out that first cartridge next time. *Auf Wiedersehen!*"

I watched the aeroplane rise from the old football field and soar away into the night. I can't tell you what bitter pangs of sadness and melancholy choked me as I walked back alone through the dear familiar old school grounds. Every tree trunk spoke eloquently of the happy days gone by when we were all playfellows there together. I sat down on the old bench by the tennis court and sobbed like a broken hearted child.

A few hours later, as I was buying my ticket in the railroad station, I was arrested. I had telephoned the hospital to send for the wretched Domaz, and when their ambulance arrived, they found him dead! They immediately watched the trains and caught me neatly enough. As I was compelled to explain about

the death of Domaz in order to escape a worse suspicion, which the Swiss military authorities had about me, I told them who I was, and showed them my credentials. They interned me for duration of the war at Visp.

I foolishly tried twice to escape before I wrote you. Then they would not permit me to write again, and they kept me more or less closely confined. After six months' waiting, I managed to get into Italy and there caught a steamer for America. But I will tell you all about that soon, for I shall be on the first boat that sails for France from New York.

Dear old Phil! You can imagine how eager I am for news of you. I am posting this letter at the Azores where we touch.

Your old pal,
ARNOLD.

THE END

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